

## **“Effect Of Planned Teaching On Knowledge Regarding Kidney Transplantation Among Family Members Of Chronic Renal Failure Patients”**

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### **Abstract:**

It is estimated that 25-40% of patients are likely to develop chronic kidney disease, with a significant percentage requiring renal transplant therapy. Renal transplantation is now widely considered the treatment of choice for patients with end-stage renal disease (ESRD) due to improved short- and long-term survival benefits over dialysis treatment. Since medication to prevent rejection is so effective, donors need not be genetically similar to their recipient. The people have misconceptions about the organ donation process which makes them less likely to be donors. The aim of the present study was to assess the effect of planned teaching on knowledge regarding kidney transplantation among family members of chronic renal failure patients. A present study was conducted by using quantitative research approach. One group pre-test post-test design was adopted for this study. The study showed that majority that is 72 % of the family members of chronic renal failure patients had poor knowledge before planned teaching whereas 86% were in excellent category of knowledge score after planned teaching. The planned teaching was effective in improving family member’s knowledge regarding kidney transplantation.

**Keywords:** knowledge, planned teaching, kidney transplantation

## I. INTRODUCTION

Adequate functioning of kidneys is essential to the maintenance of a healthy body. If there is complete kidney failure and treatment is not given, death is inevitable. It is estimated that 25-40% of patients are likely to develop chronic kidney disease; with a significant percentage requiring renal transplant therapy.<sup>1</sup> Renal transplantation is now widely considered the treatment of choice for patients with end-stage renal disease (ESRD) due to improved short- and long-term survival benefits over dialysis treatment<sup>2</sup>. Diagnosis of renal failure and its need is usually enormous to the patient and his/her family. At the beginning, many of the patients feel positive about the dialysis as it makes them feel better and keeps them alive, but there is often great uncertainty about whether it is substantial.<sup>3</sup> The disease and its treatment affect each and every point of the life of patient. Kidney transplant programs are dependent on the willingness of relatives of patients with kidney failure to donate kidneys.<sup>4</sup> The need for proper education and preparation of the patient and the family at all stages of chronic renal failure and potentially heading toward last stage renal failure cannot be neglected.<sup>5</sup> Hence in this study the main aim was to give planned teaching to the family members of chronic renal failure patients regarding kidney transplantation and assess its effectiveness on improving their knowledge regarding kidney transplantation.

**Statement of the study** - A study to assess the effectiveness of planned teaching on knowledge regarding kidney transplantation among family members of chronic renal failure patient attending selected dialysis units of Sangli Miraj Kupwad corporation area.

### **Objectives of the study:**

1. To assess existing knowledge regarding kidney transplantation among family member.
2. To assess knowledge regarding kidney transplantation among family member after planned teaching.
3. To compare knowledge before and after planned teaching.

## II. MATERIALS AND METHODS

A present study was conducted by using a Quantitative Research approach. A Pre-experimental, one group pre-test and post-test research design was used for study. The reliability of the questionnaire to assess the knowledge of family members of chronic renal failure patients regarding kidney transplantation was done by using test rest method; 'r' was calculated by using Karl Pearson's formula. The reliability coefficient 'r' of the questionnaire was 0.84 which is more than 0.7 hence the tool was found reliable. Content validity of the tool was done by 20 experts. The permission from institutional ethical committee was obtained before conduction of the study. Total 50 samples that are family members of chronic renal failure patients were selected by convenient sampling method. A prior consent was obtained from the samples for participation in the study. After pre-test planned teaching regarding kidney transplantation was given and posttest was conducted after 7 days. The same questionnaire was used for pre-test and post-test knowledge assessment of the samples.

### III. RESULTS AND DISCUSSION

In this study, 50% of the family members were between age group of 30-40 years. 40% were male whereas 60% were female. Regarding educational qualification, 55% of family members were higher secondary pass and 20% were graduates. Only 5% had some previous information regarding kidney transplantation through the sources like newspaper, pamphlet etc.

**Table 1: Knowledge score before and after planned teaching**

N: 50

Grading	Pretest		Posttest	
	Frequency	Percentage	Frequency	Percentage
Poor (0-8)	36	72%	0	0%
Good (9-16)	11	22%	7	14%
Excellent (17-20)	3	06%	43	86%

72% of family members were having poor knowledge regarding kidney transplantation before planned teaching whereas 22% good knowledge. However 86% of family members were in the category of excellent knowledge score whereas 14% were in good knowledge score category after planned teaching.

**Table 2. Comparison of pre-test and post-test knowledge score**

N: 50

Knowledge score	Mean	S.D.	t value	P value
Pre test	6.58	3.62	16.27	0.00001
Post test	17.80	2.34		

The paired t-test was used to test the hypothesis and significant difference in the level of knowledge between pretest and post-test by the family members of chronic renal failure patients regarding kidney transplantation and is significant ( $P < 0.0001$ ). Table 2 shows the mean and standard deviation of knowledge score obtained before and after the planned teaching. This is considered to be very significant, indicates significant improvement in knowledge regarding kidney transplantation among family members of the chronic renal failure patients. Furthermore, no association could be found with any demographic variables and pre-test knowledge ( $P > 0.05$ ). The present study is supported by the findings of a study conducted by Kaur *et al.*, 2015, where instead of family members care givers were the samples and 29% of them had poor knowledge score before planned teaching.<sup>6</sup> Post-test results were supported by findings of the study conducted by Lydia and Jayalakshmi, 2016, which showed in the post-test, family members/caregivers of chronic renal failure patients on hemodialysis had good

knowledge (score 17–24). This shows that there is improvement in knowledge of family members after planned teaching.<sup>7</sup>

### **Conclusion**

From the data analysis and findings of the present study, it is concluded that there was significant difference between the pre-test knowledge level and post-test knowledge level among family members of chronic renal failure patients regarding kidney transplantation. The mean knowledge score of the family members during the pre-test was 6.58 (32.8%), whereas it was increased up to 17.80 (89%) during the post-test. The planned teaching was effective in improving family member's knowledge regarding kidney transplantation. Hence, such planned or structured teaching programs on kidney transplantation among family members can enhance their knowledge and create awareness regarding kidney transplantation.

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