# **Knowledge on Nursing Management Regarding Renal Transplant Among The Nurses**

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# **ABSTRACT:**

**Background:** Renal transplantation is considered the first-choice method of renal replacement therapy for end stage renal disease patients who have no physical or psychological contraindications. This study assessed the Knowledge on Nursing Management Regarding Renal Transplant among the Nurses in Nellore.

**Objectives:** 1) To assess the level of knowledge and nursing management regarding renal transplant among the nurses in Narayana Medical College and Hospital at Nellore. 2) To determine the association between level of knowledge on nursing management regarding renal transplant among nurses with selected socio demographic variables.

**Methods:** The staff nurses in this cross-sectional study, working in Narayana medical college and hospital, Nellore. A total of 100 staff nurses were randomly selected. Trained investigators administered a standard questionnaire to each participant during a face to face interview and carried out data collection procedure.

**Results:** The results show that, out of 100 staff nurses with regard to the level of the knowledge on computers 10 (10%) nurses having 'C' grade knowledge, 88 (88%) of nurses having 'B' grade knowledge, and 2 (2%) nurses having 'A' grade knowledge.

**Conclusion:** Majority of the nurses has good knowledge on basic management regarding renal transplant but there is a space for improvement in dealing with complications to provide quality service to kidney transplantation patients. Educational intervention will have a positive effect in developing critical care nursing performance for caring of kidney transplantation patients and improving nurse's knowledge <sup>15-20</sup> and practice can favorable affect the outcome of kidney transplantation patients. There is a need for continued and written standards training programs regarding kidney transplantation patients should be available.

Keywords: Knowledge, Nursing Management, Renal Transplant, Staff Nurses.

# 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<sup>1</sup>. It is estimated that 25-40% of patients are likely to develop chronic kidney disease, with a significant percentage requiring renal replacement 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<sup>2</sup>. The incidence of ESRD or stage 5 chronic kidney disease (CKD) varies widely by state and country. In the US the incidence is 338 new cases per million population.

The successful kidney transplantations were undertaken in 1954 in Boston and Paris thereafter at the end of 2003 a total of 441.051 people were being treated for ESRD approximately 28% have a functioning transplant, 66 received hemodialysis and 5.7% are undergoing form peritoneal dialysis.

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Kidney transplantation is the ideal treatment for patients with chronic renal failure, and it is mandatory for those who do not present technical conditions for the installation/maintenance of central venous access and/or peritoneal access. With the introduction of transplantation as a therapeutic option, the number of patients who are able to receive treatment for previously untreatable diseases has increased significantly in Brazil<sup>3</sup>. The National Transplant System (NTS) is the largest public transplant program in the world. The Ministry of Health provides about one billion dollars annually for the NTS<sup>4</sup>.

Over 95% of transplants are performed as part of the Unified Health System (UHS) and the monitoring of all these patients is in general linked to the transplant teams. All transplant policy is in line with laws No. 8,080/1990 and No. 8,142/1990, which govern the operation of the UHS<sup>(2)</sup>. Despite difficulties, Brazil has progressively improved its performance. A total of 3,463 (18.8 per million people pmp) kidney transplants were conducted in 2007, while by 2012 that number had risen to 5,385 (28.2 pmp). This increase is primarily due to the growing number of effective deceased donors, which was 18.8 pmp in 2007 and rose to 28.2 pmp in 2012<sup>5</sup>.

Due to the specificity of kidney transplantation, the guidelines for these patients are also specific, since there are many possible complications in the postoperative period. Thus, there is a clear need for a multidisciplinary team that knows how to identify such complications in order to take action rapidly. Since nurses are the professionals who care for the patient throughout the days following the operation, they can recognize the signs and symptoms of surgical, cardiac, allograft rejection, and infection complications. For a successful transplantation, the participation of nurses at all stages of the process is essential, from the care provided to the donor of multiple organs and tissues, to the care provided to patients in the posttransplantation period. These patients require experienced professionals and specialized care<sup>5</sup>.

Kidney transplantation has a high cost that increases with every rehospitalization. Therefore it is necessary to minimize the risk in terms of the return of the transplanted patient to the unit, thus justifying the importance of nursing management. With this study, we hope to contribute to analyse the level of Knowledge On Nursing Management Regarding Renal Transplant Among The Nurses.

# **Detailed Research Plan:**

The Research approach adopted for study was quantitative research approach found to be consistent with the purpose of the study. The research design selected for the study was a Non experimental, descriptive design. The area of study was Narayana Medical College and Hospital of Nellore district, Andhrapradesh. The target population of this study consisted of all staff nurses who meet the inclusion criteria like who are between 20-60 years, who are available during the data collection time.

The sample size of the present study comprises 100 staff nurses selected by using convenience sampling technique. The Inclusive criteria's are age group of 18-59 years, able to understand English. Structured knowledge questionnaires were developed to assess the knowledge on nursing management regarding renal transplant among the nurses. The tool was found to be reliable (r=0.89), feasible and practicable. Data analysis was done using descriptive and inferential statistics.

# TOOLS FOR DATA COLLECTION:

SECTION A: It deals with demographic data including age, Educational status, Religion, Source of knowledge, Gender, Marital status, Source of information, Attended computers course, No. of times attended and Designation.

**SECTION B:** The tool consist of 2 parts as follows.

Part 1 – Deals with selected socio demographic variables.

Part 2 – In consist of 2 sections.

Section – I: Structured questionnaire to assess the level of knowledge.

# **DATA COLLECTION PROCEDURE:**

This cross-sectional study was conducted in Narayana Medical College and Hospital of Nellore district during 2016. This study comprises of both male and female staff between 20-59 years, staff on leave and is not willing to participate and to give informed consent were excluded from the study. Structured

questionnaire were developed to assess the knowledge and Observational check list to assess the level of practice regarding Glasgow coma scale among the nurses in Narayana Medical College Hospital, Nellore.

Institutional ethics committee approved the study tool. Written informed consent was obtained from participants.

Data was analyzed using the Statistical Package of Social Sciences (SPSS) 20.0 version of window software. Descriptive and inferential statistics used like Frequency and percentage distribution Mean, Median, Mode and Standard Deviation and chi square was used to test the assumption.

# **RESULTS AND DISCUSSION:**

A total of 100 staff nurses were participated in the study. The table 1 shows the socio demographic profile of the staff nurses.

Table 1. Frequency and percentage distribution of socio demographic data. (N=100)

Sl.No	Demographic variables	Frequency	Percentage	Total
1.	Age:			
	a) 21-25 yrs	42	42%	
	b) 26-30 yrs	37	37%	100%
	c) 31-35 yrs	21	21%	
		4	N. /	
2.	Educational qualification :		321	
	a) ANM	13	13%	
	b) GNM	38	38%	100%
	c) B.Sc Nursing	49	49%	
3.	Family income :		A	
	a) Below Rs.4000	25	25%	ş
	b) Rs.4001-8000	40	40%	100%
	c) Rs.8001-12,000	28	28%	
	d) above Rs.12,000	7	7%	
4.	Working experience:			
	a) < 1 years	29	29%	
	b) 2 yrs – 3 yrs	38	38%	100%
	c) 4 yrs – 5 yrs	23	23%	
	d) > 5 yrs	10	10%	

**OF KNOWLEDGE RENAL** LEVEL  $\mathbf{ON}$ NURSING **MANAGEMENT** REGARDING TRANSPLANT AMONG NURSES (N=100)

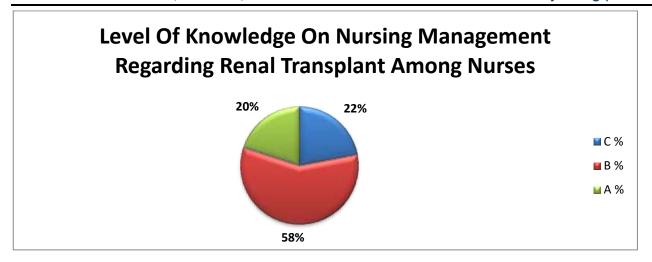


FIG:1: LEVEL OF KNOWLEDGE ON NURSING MANAGEMENT REGARDING RENAL TRANSPLANT AMONG NURSES

FIG:1shows that 22(22%) of nurses having C grade knowledge 58(58%) of nurses having B grade knowledge and 20(20%) of nurses having A grade knowledge.

**DISCUSSION:** Kidney transplants have become common surgical procedures that are associated with high success rates. The complications associated with the procedure are low especially compared with other organ transplants. Nevertheless the detection, accurate diagnosis and timely management of surgical complications after kidney transplant are important tasks of the team managing these patients as some of the complications can result in significant morbidity of the recipient, risk of graft loss and mortality. (Peneva., et al., 2015)<sup>6</sup>. The result of the present study shows a positive effect of an educational intervention on critical care nurses' performance for kidney transplantation. Moreover, the result of the present study supported the stated hypothesis that, there was a highly significant improvement of knowledge and practice at both immediate post intervention and follow up phases as compared with pre intervention phase. Regarding sociodemographic characteristics of the studied nurses, the result of the current study indicated that mean age of nurses was 30.24±3.59 years. These finding agreed with<sup>7</sup>, 49% of them had a bacularate degree of nursing education. These findings are in contrast with<sup>7</sup>, In relation to the studied nurses' years of experience, it was found that, 38% of the studied nurses had from 2-3 years. As regarding the level of knowledge of the studied nurses in the present study findings revealed that nearly two third of studied nurses had a poor knowledge. These findings are agreed with<sup>8</sup>, in the study to assess "Perceptions of nurses and clients about nursing care after kidney transplantation", it was revealed that studied nurses had a defiance of knowledge. These findings may be due to the lack of frequent training courses<sup>9</sup>.

**Conclusion**: Majority of the nurses has good knowledge on basic management regarding renal transplant but there is a space for improvement in dealing with complications to provide quality service to kidney transplantation patients. Educational intervention will have a positive effect in developing critical care nursing performance for caring of kidney transplantation patients and improving nurse's knowledge<sup>10</sup> and practice can favorable affect the outcome of kidney transplantation patients. There is a need for continued and written standards training programs regarding kidney transplantation patients should be available.

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**Conflict of interests**: Nothing to declare.

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