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## A study to assess the effectiveness of teaching module on perceived readiness for hospital discharge among in-patients diagnosed with kidney disease admitted in a selected hospital, Bangalore

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### Abstract

**Background:** Readiness for hospital discharge has been described as an estimate of patients and family member's ability to leave an acute care facility, a perception of being prepared or not prepared for hospital discharge. It is also an indicator of sufficient recovery to allow safe discharge. Nurse-delivered discharge teaching increases self-care adherence, improves clinical outcomes and reduces cost of care. Assessment produces actionable information to identify areas of low readiness for discharge and to help prepare patients for discharge. It can also help reduce readmissions.

### Objectives of the study

1. To compare the perceived readiness for hospital discharge among kidney disease patients between experimental and control group.
2. To determine the association of perceived readiness for discharge with selected baseline variables in both the group.

**Methods:** The data was collected from patients diagnosed with kidney disease using Quasi-experimental post-test only control group design. A total of 54 patients with kidney disease were recruited from SJMCH, Bangalore using a non-probability convenient sampling method in which 27 were grouped into control group and 27 into experimental group. Structured interview was used to collect baseline information and assessment was done using Readiness for Hospital Discharge Scale (RHDS). For experimental group, teaching module was administered on the 2<sup>nd</sup> day of admission and for controlled group standard of care was given. For both groups, readiness for hospital discharge was assessed by RHDS on the day of discharge from the hospital. The data was analyzed by using descriptive and inferential statistics.

### Results

- The total readiness score in experimental group ranged between 104-189 with a mean of 163.93, whereas in control group the range was 80-186 with a mean of 123.96. A statistically significant difference was found in the perceived readiness for discharge with p value of 0.000.
- There is a significant difference in the mean of discharge readiness score between the two groups with the mean significantly higher for experimental groups.
- Statistically significant association of RHDS was found with gender ( $p < 0.008$ ) and family support ( $p < 0.009$ ) in experimental group and monthly income ( $p < 0.007$ ) in control group.
- No association was found with other baseline variables like age, education, presence of AV fistula, duration of hospitalization on day of discharge, associated illness and family history of kidney disease.

**Conclusion:** The study showed that teaching module has enhanced readiness for hospital discharge which is a simple, effective and independent intervention to prepare patients for discharge.

**Keywords:** RHDS-Readiness, hospital, discharge scale

### Introduction

Kidney diseases affect around 850 million people worldwide. The prevalence of chronic kidney disease (CKD) among men is 10.4% and 11.8% among women. Around 13.3 million people are affected with Acute Kidney Injury (AKI) every year. The number of people worldwide who receive kidney replacement therapy or a kidney transplantation is around 2 million<sup>[1]</sup>.

Chronic Kidney Disease has moved from 27<sup>th</sup> position to 18<sup>th</sup> of the most common cause of death around the world [1]. The story in India is not different either: The age-adjusted incidence rate of renal diseases in India was reported to be more than 150 per million population and > 100,000 new patients enter renal replacement programs annually in India. In a recent multicenter study in India, the prevalence of CKD was observed to be 17.2%, with about 6% of the individuals having CKD stage 3 or worse [2].

But what makes this more challenging is the fact that kidney diseases such as chronic kidney disease (CKD) and renal failure are irreversible, deteriorating and progressive. The fact that kidney conditions like End- Stage Renal Failure (ESRD) can largely increase cardiovascular risk becomes another dark side of kidney diseases. Thus, it is not surprising that most of the deaths from cardiovascular diseases are caused by chronic kidney disease. This demands an entire shift in the patient's lifestyle such as diet, exercise, fluid intake and medication administration [3].

Majority of the patients fails to realize that the decline or failure in any aspect said above can progress the disease massively. This is largely due to the absence of an effective provision of knowledge regarding the disease condition and information about proper self- management of condition, ultimately leading to the readmission of the patient within 30 days or less from the day of discharge

This concept of 'readiness for discharge' however becomes even more complex for patients dealing with chronic, progressive and lifestyle impacting disease conditions. And one of these disease conditions that often stands at the top of this list are conditions related to kidney.

Care coordination activities have been successful in promoting positive perceptions of discharge readiness and ability to manage care at home. Active patient communication, family participation, and interdisciplinary collaboration during discharge planning promotes congruent identification of needs and priorities by the patient, family, and clinician, leading to successful home transition and satisfaction with discharge planning services. Readiness for discharge is a transitional outcome in the continuum of care from hospital to home [2]. Improving patient satisfaction as well as reducing post discharge adverse events are relevant measures of a successful discharge process, and nurses bring a unique perspective of caring to this process [7].

### Need for the study

in the current scenario the diseases affecting kidney such as urinary tract infections (UTI), acute kidney injury (AKI), kidney/renal trauma, nephrotic syndrome, hydronephrosis, glomerulonephritis, pyelonephritis, renal calculi, renal cell carcinoma, chronic kidney disease (CKD), end –stage renal failure (ESRD) etc. are one of the leading causes of death throughout the country [8].

However, most of the kidney disease being irreversible, chronic and progressive demands an entire shift in the patient's lifestyle such as diet, exercise, fluid intake, medication administration etc [5]. Majority of the patients fail to realize that the decline or failure in any aspect said above can progress the disease massively but on the other hand its progression can also be delayed through targeted lifestyle modifications that are based on the readiness to change health – promoting lifestyle behavior, renal protection knowledge, and physical indicators of a patient with early stage of chronic kidney disease.

This deficit in knowledge can be largely described due to the absence of proper provision of knowledge regarding disease condition and information about proper self-management of condition. The health education that is supposed to be provided at any point of time during the patient's stay at the hospital or at the time of discharge is unfortunately found to be absent. A common trend found in patients with kidney conditions that get discharged is that they are assessed to be eligible for the same through medical and physical parameters such as reduction in signs and symptoms, improvement in disease conditions, laboratory values and so on.

Assessment of readiness for discharge and the transition to home-based recovery and care has become increasingly important for patient safety, satisfaction, and outcomes. Identification of predictors of readiness or lack of readiness is essential for determining appropriate timing of discharge and subsequent post discharge follow-up needs [10].

A nurse on combining the effect of her teaching along with information about patient's personal status, knowledge, perceived coping ability and expected support gets a crystal-clear idea about the eligibility and the readiness of the patient for discharge. This unique yet ground-breaking approach can prevent adverse effects that occur due to ill-timed discharge, reduce or abort repeated hospital admission for the same condition, improve patient's self- care management skills, arrests progression of disease, decreases patient's dependence, and improves patient's knowledge level.

In today's era of patient centered care eliciting the patient's readiness for discharge and promoting self- reliance should be the focus of discharge planning. The investigator has seen that discharge planning is not based on readiness of patients during her clinical experience. In order to prevent readmission and promote self-dependency in home care, investigator felt the need to assess readiness for discharge and prepare a teaching module and which can be used in a regular basis for all the patients in inpatient unit. Through this study investigator can assist our patients with successful discharges by empowering them to become self- advocating and independent health care consumers.

This unique yet ground-breaking approach can prevent adverse effects that occur due to ill- timed discharge, reduce or abort repeated hospital admission for the same condition, improve patient's self- care management skills, arrests progression of disease, decreases patient's dependence, and improves patient's knowledge level.

### Objectives of the study

1. To compare the perceived readiness for hospital discharge among patients with kidney disease between experimental and control group.
2. To determine the association of perceived readiness for discharge with selected baseline variables in both the group.

### Hypothesis

H1- There will be a significant difference in patients' perceived readiness for discharge between experimental and control group at 0.05 level of significance.

H2- There will be a significant association between patient's perceived readiness for discharge in both experimental and control group and selected baseline variables at 0.05 level of significance.

## Materials and Methods

### Sources of data

Data was collected from patients diagnosed with kidney diseases from kidney disease admitted in nephrology ward of St John's Medical College and Hospital (SJMCH).

### Research approach

In view of the problem selected for the study and for accomplishment of objectives, a quantitative research approach was used as an appropriate research approach.

### Research design

Research design is a conceptual structure within which research should be conducted. The function of research design was to provide for the collection of relevant information. The research design selected for the study was Quasi Experimental Post Test Only Control Group Design.

### Setting of the study

The setting of the study was conducted in Nephrology ward of St John's Medical College Hospital (SJMCH). St John's Medical College Hospital is a 1450 bedded multi-specialty, teaching hospital and tertiary care referral center with both inpatient and outpatient services. Nephrology inpatient unit of St John's Medical College Hospital has a total bed strength of 27 beds.

### Population

The target population of the study is patients who are diagnosed with kidney diseases. The accessible population of the present study consist of all patients diagnosed with kidney diseases in the neurology Ward of St John's Medical College Hospital (SJMCH).

### Methods of data collection

#### Sample

In this study sample consists of 54 patients diagnosed with kidney diseases admitted in nephrology Ward of SJMCH.

#### Sampling procedure

In this study, technique of sample selection is: non probability convenience sampling technique.

#### Sample size

In a study to assess the discharge readiness of patients after a surgery it has been observed that 76% of the participants have at least moderate readiness (Ref: Wang *et al*). To observe the similar result with 115% relative precision and 95% confidence level, the minimum required sample size is 54.

#### Inclusion criteria

- Patients between 18-60 years of age.
- Patients who understand either Tamil, English, Kannada, Hindi, Telugu or Malayalam

#### Exclusion criteria

- Patients who are critically ill
- DAMA patients

#### Instruments used

Section A: Proforma to elicit the baseline variables of patient.

Section B: Readiness for Hospital Discharge Scale.

#### Description of the tools

**Section A:** Proforma to elicit the baseline variables of patient.

**Section B:** The readiness for discharge scale (RHDS)

**The RHDS measures four domains of discharge readiness:** Personal status; Knowledge; Perceived coping ability and Expected support. It measures readiness to return home from the hospital. It is administered on the day of discharge, four hours prior to discharge.

21 item questionnaires with four sub scales

- Personal Status = (1-6 items) (item no 2 has reverse score)
- Knowledge = (7-14 items)
- Perceived Coping Ability = (15-17 items)
- Expected Support-(18-21 items)

#### Interpretation of level of perceived readiness for discharge

- Very High Discharge Readiness- 90-100%
- High Discharge Readiness-80-89%
- Moderate Discharge Readiness-70-79%
- Low Discharge readiness-less than 70%

Patients with Low Discharge readiness will be referred to the treating doctor.

#### Data Collection Method

Data was collected after obtaining clearance from Institutional Ethical Committee and formal permission from Associate Director of the Hospital. 54 subjects who fulfilled the inclusion criteria were recruited for the study (27 in each group) using non - probability convenience sampling technique. The purpose of study will be explained by using the subject information sheet and after that informed written consent was obtained from the respondents.

First, data was gathered from the control group receiving standard care. The baseline variables were obtained on a proforma and perceived readiness for discharge was assessed using Readiness for Hospital Discharge Scale (RHDS) on the day of discharge.

After completion of data collection from the control group, the subjects under experimental group were identified and the teaching module was provided by the investigator on a one-on-one basis on the 2<sup>nd</sup> day of admission. And on the day of discharge, the investigator was assessed the readiness for discharge. The approximate time for each subject was 20 to 30 minutes.

#### Data analysis plan

Collected data was organized in a master sheet and analyzed using both descriptive and inferential statistics.

#### Descriptive statistics

Description of the subjects with respect to baseline variables was presented using frequency and percentages. Mean, mean percentage and standard deviation was used to describe the perceived readiness for discharge.

#### Inferential statistics

Independent t-test was used to compare between experimental and control group. ANOVA and Independent t-test was used to analyze between perceived Readiness for Hospital Discharge Scale and selected demographic variable.

**Section A:** Distribution of baseline variables of both experimental and control group.

**Table 1 a):** Frequency and percentage distribution of subjects according to age, gender and education in control and experimental group. n=54

Sl. No.	Variables	Control F	Group %	Experimental F	Group %
1.	<b>Age</b>				
	i)18-30	4	14.8%	6	22.2%
	ii)31-45	6	22.2%	8	29.6%
	iii)46-60	17	63.0%	13	48.1%
2.	<b>Gender</b>				
	i)Male	21	77.8%	21	77.8%
	ii)Female	6	22.2%	6	22.2%
	iii)Others	0	0%	0	0%
3.	<b>Education</b>				
	i)Postgraduate	2	7.4%	2	7.4%
	ii)Graduate	10	37.0%	8	29.6%
	iii)Intermediate	11	40.7%	13	48.1%
	iv)High School	4	14.8%	3	11.1%
	v)Illiterate	0	0.0%	1	3.7%

Data presented in Table 1(a) reveals that among the 54 study subjects, 17(63.0%) of control group and 13(48.1%) of experimental group belong to the age group of 46-60.

21(77.8%) of both control and experimental group are males.11 (40.7%) of control group and 13(48.1%) of experimental group have intermediate education.

**Table 1 b):** Frequency and percentage distribution of subjects according to monthly income, family support system and presence of AV fistula in control and experimental group. n=54

Sl. No.	Variables	Control F	Group %	Experimental F	Group %
1.	<b>Monthly income</b>				
	i)More than or equal to 30,000	7	25.9%	4	14.8%
	ii)20,000-30,000	6	22.2%	6	22.2%
	iii)10,000-20,000	9	33.3%	11	40.7%
	iv) Less than or equal to 5,000	5	18.5%	6	22.2%
2.	<b>Family support system</b>				
	i)Yes	24	88.9%	24	88.9%
	ii)No	3	11.1%	3	11.1%
3.	<b>Presence of av fistula</b>				
	i)Yes	13	48.1%	13	48.1%
	ii)No	14	51.9%	14	51.9%

Data presented in Table 1(b) reveals that among the 54 study subjects, 9(33.3%) of control group and 11(40.7%) of experimental group have a monthly income of Rs 10,000-

20,000. 24(88.9%) of both control and experimental group have family support system. 14(51.9%) of both control and experimental group have no presence of AV fistula.

**Table 1 c):** Frequency and percentage distribution of subjects according to duration of hospitalization on the day of discharge and associated illness in control and experimental group. n=54

Sl. No.	Variables	Control F	Group %	Experimental F	Group %
1.	<b>Duration of hospitalization on the day of discharge</b>				
	i)2 days	3	11.1%	10	37.0%
	ii)3 days	3	11.1%	6	22.2%
	iii)4 days	2	7.4%	8	29.6%
	iv)More than or equal to 5 days	19	70.4%	3	11.1%
2.	<b>Associated Illness</b>				
	i)Diabetes	12	44.4%	5	18.5%
	ii)Hypertension	20	74.0%	23	85.1%
	iii)cardiovascular disease	4	14.8%	4	14.8%
	iv)Obesity	2	7.4%	1	3.7%
	v)None of the Above	6	22.2%	4	14.8%

Data presented in Table 1(c) reveals that among the 54 study subjects, 19(70.4%) of control group have a duration of hospitalization of more than or equal to 5 days and 10(37.0%) of experimental group have a duration of 2 days on the day of discharge. 20(74.0%) of control group and 23(85.1%) of experimental group have hypertension.

**Section B:** Comparison of perceived readiness for hospital discharge in experimental and control group.

**Objective-1:** To compare the perceived readiness for hospital discharge among kidney disease patients between experimental and control group.

**Hypothesis -1**

H1- There will be a significant difference in patients' perceived readiness for discharge between experimental and control group at 0.05 level of significance.

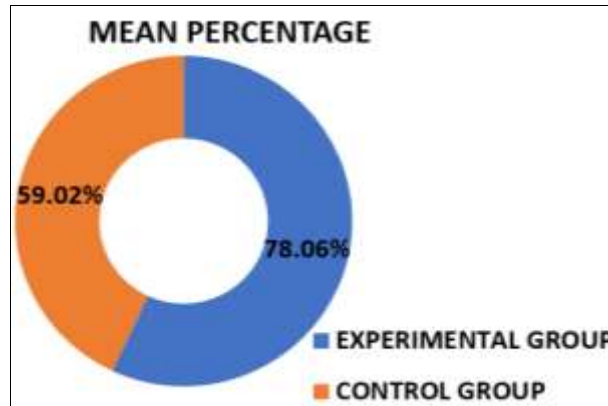
**Table 2 a):** Range, mean, mean percentage, standard deviation, mean difference, t-test and p value of perceived readiness of hospital discharge in experimental and control group. n=54

Group	Maximum Score	Range	Mean	Mean%	SD	Mean Difference	Independent t-test	P value
Experimental group	210	104-189	163.93	78.06%	19.235	39.96	5.319	*0.000
Control group	210	80-186	123.96	59.02%	33.970			

(\*-significant)

Data presented in table 2(a) reveals that the mean of RHDS in experimental and control group was 163.93 and 123.96 with a mean difference of 39.96. A statically significant

difference was found in the perceived readiness for hospital discharge between experimental and control group with a p value of 0.000. Thus, H1 is accepted.



**Fig 1:** Mean percentage of RHDS in experimental and control group.

Data presented in figure 1(a) reveals that the mean% of RHDS in experimental and control group was 78.06% and 59.02%.

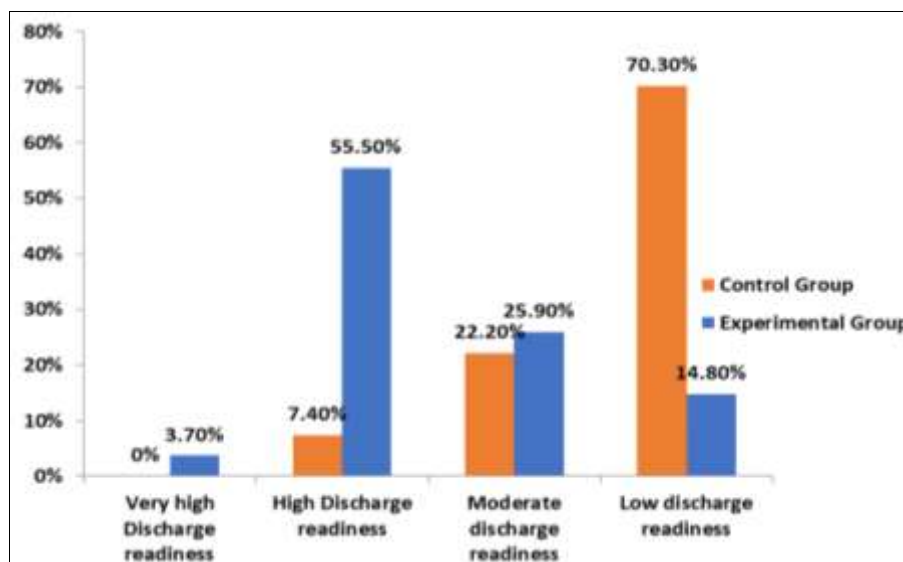
**Table 2 b):** Frequency, percentage, test of significance and p value of level of perceived readiness for discharge in experimental and control group. n=54

Level Of Perceived Readiness For Discharge	Control Group		Experimental Group		Test of Significance	p value
	F	%	F	%		
Very High Discharge Readiness	-	-	1	3.7%		
High Discharge Readiness	2	7.4%	15	55.5%	-	*0.000
Moderate Discharge Readiness	6	22.2%	7	25.9%		
Low Discharge Readiness- less than 70%	19	70.3%	4	14.8%		
<b>Total</b>	27	100%	27	100%		

(\*-Significant)

Data presented in table 2(b) reveals that experimental group (55.5%) have high discharge readiness while control group (70.3%) have low discharge readiness. There was a highly

significant difference between the discharge readiness among control and experimental group.



**Fig 2:** Percentage of level of perceived readiness for discharge in experimental and control group.

Data presented in Figure 2 reveals that experimental group (70.3%) have low discharge readiness. (55.5%) have high discharge readiness while control group

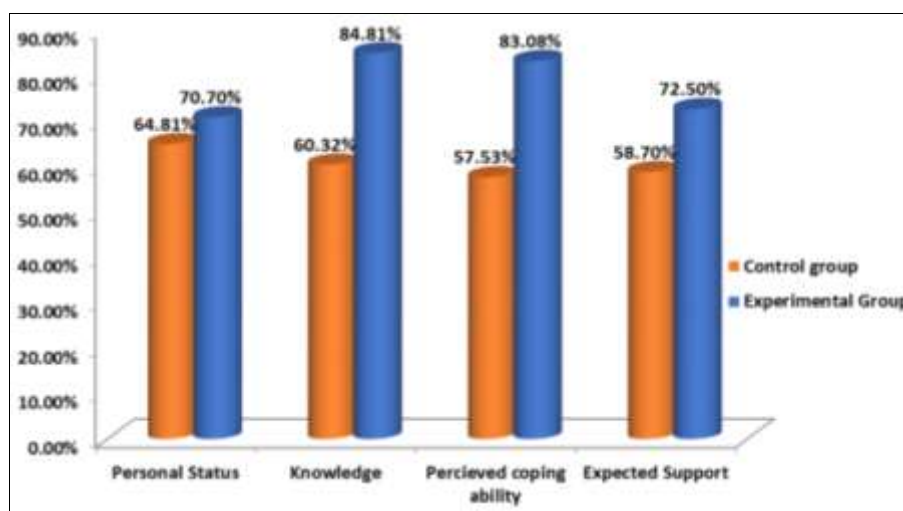
**Table 2 c):** Range, mean, mean percentage, standard deviation, mean difference, t - Test and p value of various domains of perceived readiness of hospital discharge in experimental and control group n=54

Sub scales	Maximum score	Control group				Experimental group				Mean difference	Independent t test	p value
		Range	Mean	Mean %	S.D	Range	Mean	Mean%	S.D			
Personal status	60	21-49	33.88	64.81%	1.54729	20-55	42.4444	70.74%	7.6445	8.55556	4.052	*0.000
Knowledge	80	22-76	48.2593	60.32%	3.31000	45-77	67.8519	84.81%	8.73853	19.59259	5.277	*0.000
Perceived coping ability	30	7-30	17.2593	57.53%	1.12545	20-30	24.9259	83.08%	2.80008	7.66667	6.144	*0.000
Expected support	40	15-38	23.4815	58.70%	1.46602	10-40	29.0000	72.50%	8.91412	5.51852	2.446	0.018

(\* - Significant)

Data presented in table 2(c) reveals that there is a significant difference in the mean of each domain between groups. The mean is significantly higher for the experimental group in each domain. The lowest domain in the control group was

perceive coping ability with mean percentage of 57.53% and the highest domain in the experimental group was found to be knowledge with a mean percentage of 84.81%.



**Fig 3:** Percentage of various domains of perceived readiness of hospital discharge in experimental and control group.

Figure 3: reveals that there is a significant difference in the mean of each domain between groups. The mean is significantly higher for the experimental group in each domain. The lowest domain in the control group was perceived coping ability with mean percentage of 57.53% and the highest domain in the experimental group was found to be knowledge with a mean percentage of 84.81%

baseline variables.

**Objective 2:** To determine the association of perceived readiness for discharge with selected baseline variables in both the groups.

**Section C:** Association of perceived readiness of hospital discharge in experimental and control group with selected

**Hypothesis 2:** There will be a significant association between patient’s perceived readiness for discharge in both groups and selected baseline variables at 0.05 level of significance.

**Table 3 a):** Mean, Standard deviation, Test of significance and p value for the association of age, gender and family support with perceived readiness for discharge in experimental and control group. n=54

Sl. No	Variables	Control group					Experimental Group				
		N	Mean	SD	t-test	p value	N	Mean	SD	t- test	p value
1.	<b>Age in years</b>	4	112.5	41.315	0.817	0.454	6	161.00	16.407	\$1.669	0.210
	i) 18-30	6	138.50	31.494			8	155.50	26.203		
	ii) 31-45	17	121.59	33.550			13	170.46	13.824		
2.	<b>Gender</b>	21	124.90	33.421	0.265	0.793	21	160.67	20.563	#-2.908	*0.008
	i) Male	6	120.67	38.934			6	175.33 0	5.645 0		
	ii) Female	0	0	0			0				
3	<b>Family Support</b>	24	125.17	34.128	0.513	0.612	24	167.21	14.908	#2.825	*0.009
	i) Yes	3	114.33	38.083			3	137.67	33.020		
	ii) No										

(#- Independent t-test, \$-ANOVA. \*-significant).

Data presented in Table 3(a) reveals that there is no statistically significant association of RHDS with age whereas there had been statistically significant association of RHDS with gender and family support in experimental

group. Females in experimental group have significantly higher mean of discharge readiness. Subjects with family support in experimental group have significantly higher mean of discharge readiness.

**Table 3 b):** Mean, Standard deviation, Test of significance and p value for the association of monthly income and education with perceived readiness for discharge in experimental and control group. n=54

Sl. No	Variables	Control Group					Experimental Group				
		N	Mean	SD	t-test	p value	N	Mean	SD	t- test	p value
1.	<b>Monthly Income</b>	7	119.71.	32.196.	5.252	* 0.007	4.6	176.75.	6.185.	\$1.238	0.319
	i) More than or equal to 30,000	6	93.00	20.909				158.00	14.156		
	ii) 20,000-30,000	9	128.44	33.148				166.82	17.291		
	iii) 10,000-20,000	5	159.00	12.349				156.00	28.900		
iv) Less than or equal to 5000											
2.	<b>Education</b>	2	138.00	45.255	1.279	0.305	2	160.00	33.941	\$ 1.181	0.346
	i) Postgraduate	10	137.10	26.822				173.75	10.444		
	ii) Graduate	4	104.00	20.897				167.33	10.599		
	iii) High School	11	116.73	39.850				159.62	21.945		
	iv) Intermediate	0	0	0				131	139.00		
v) Illiterate											

(#- Independent t-test, \$-ANOVA. \*-significant).

Data presented in Table 3 (b) reveals that there is no statistically significant association of RHDS with education

whereas there had been statistically significant association of RHDS with monthly income in experimental group.

**Table 3 c):** Mean, Standard deviation, Test of significance and p value for the association of presence of AV fistula, duration of hospitalization on the day of discharge and associated illness with perceived readiness for discharge in experimental and control group n=54

Sl. No	Variables	Control Group					Experimental Group				
		N	Mean	SD	t-test	p value	N	Mean	SD	t- test	p value
1.	<b>Presence of AV fistula</b>	13	128.31	34.451	0.633	0.532	13	165.69	22.529	#0.453	0.655
	i) Yes	14	119.93	34.292			14	162.29	16.293		
2.	<b>Duration of hospitalization on the day of discharge</b>	3	118.00	40.150	0.753	0.532	10	164.40	11.843	\$0.926	0.444
	i) 2 days	3	111.67	48.014			6	154.00	30.007		
	ii) 3 days	2	156.50	19.092			8	156.50	19.398		
	iii) 4 days	19	123.42	32.592			3	175.33	9.609		
	iv) More than or equal to 5 days										
3	<b>Associated illness</b>	1	124.75	29.65	0.103	0.903	22	166.27	19.553	\$1.514	0.240
	i) Single comorbidity	6	117.80.	32.98.			1.4	172.00.	0.13.089		
	ii) More than one comorbidity	5	127.00	49.39							
	iii) No comorbidity	6									

(#- Independent t-test, \$-ANOVA).

Data presented in Table 3(c) reveals that there is no statistically significant association of RHDS with presence of AV fistula, duration of hospitalization and associated illness.

than or equal to 5 days duration of hospitalization on the day of discharge.

- Maximum of (85.1%) in experimental group and (74%) in control group had associated illness of hypertension.
- With respect to family history of kidney disease (85.2%) in experimental group and (100%) had no family history.

**Major finding of the study**

**Baseline variables**

- Most of the subjects belonged to the age group of 46-60 years (48.1%) in experimental and (63%) in control group.
- Regarding gender majority of the subject in the study (77.8%) in experimental group and (77.8%) were male.
- Regarding education level of the subject in the study (48.1%) in the experimental and (40.7%) in the control group were intermediate in both the groups.
- In respect to monthly income (40.7%) in experimental group and (33.3%) in control group had monthly income between 10,000-20,000
- With respect to family support system, present study showed (88.9%) of subjects had family support system.
- With respect to presence of AV fistula (51.9%) in both groups had no fistula.
- Maximum percentage of (37%) in experimental group have 2 days and (70.4%) in control group had more

**Comparison or perceived readiness for hospital discharge in experimental and control group.**

- The total readiness score in experimental group ranged between 104-189, with an average of 163.93±19.235, where as in control group the range was 80-186 with an average of 123.96 ±33.970. A statically significant difference was found in the perceived readiness for hospital discharge between experimental and control group with a p value of 0.000.
- The findings revealed that in experimental group majority had high discharge readiness (55.5%) while in control group had moderate discharge readiness (22.2%). However, the levels of readiness for discharge between the two group was a highly statistically significant.
- There is a significant difference in the mean of each

domain between groups. The mean is significantly higher for the experimental group in each domain.

#### **Association of perceived readiness for hospital discharge in experimental and control group with selected baseline variables.**

- In comparison of three domains with experimental and control group, there is no statistically significant association of RHDS with age and marital status whereas there had been statistically significant association of RHDS with gender in experimental group. Females in experimental Mean, Standard deviation, Test of significance and p value ess.
- There is no statistically significant association of RHDS with occupation and education whereas there had been statistically significant association of RHDS with family support in experimental group. Subjects with family support in experimental group have significantly higher mean of discharge readiness.
- There had been statistically significant association of RHDS with monthly income in control group in experimental group. The mean is significantly higher for those who have low income.
- There is no statistically significant association of RHDS with presence of AV fistula and duration of hospitalization.
- There is a significant difference in the mean of each domain between groups. The mean is significantly higher for the experimental group in each domain.

**Nursing implications:** This study has implications for use in nursing practice, nursing administration, nursing education, and nursing research.

#### **Nursing Practice**

- Nurses can be encouraged to assess the perceived readiness for hospital discharge of the patients using the RHDS.
- The module of the study could be incorporated into discharge teaching for kidney patients.

#### **Nursing Administration**

Nursing administrators could implement the following.

- The teaching module can be introduced and implemented as an intervention during discharge teaching to improve readiness for discharge as a routine practice to reduce complications and readmission.
- In-service education can be conducted for staff nurses on assessment using the RHDS scale as a part of discharge preparation for every patient.
- Less-ready patients could be identified and appropriate strategies for addressing gaps in readiness could be adopted to avoid adverse outcomes.

**Nursing education:** Nursing educator could

- Incorporate to include readiness for discharge assessment while educating students in nursing care of patients in the wards.
- Prepared student nurses for rendering competent teaching and preparation for teaching modules for discharge readiness among hospitalized patients.

#### **Nursing research**

An important database for using the Readiness for

Discharge scale as a measurement tool to assess the perceived readiness of discharge of the patients.

- An evidence to create awareness among the society regarding importance of discharge assessment to reduce complications and readmission.
- As a basis for nursing professionals and students to conduct further studies in different aspects of perceived readiness of discharge in hospitalized patients.

#### **Recommendations**

- Study can be conducted for different categories of patient.
- Comparison of RHDS using different tools could be analyzed (Quality of discharge teaching scale, Care Coordination Scale, Post Discharge Coping Difficulty scale)
- Compared RHDS with single session versus on multiple session.

**Limitations of the study:** The teaching module was administered only one day, if there were multiple teaching sessions readiness for discharge could be higher. Readiness for Hospital Discharge Scale (RHDS) was assessed on the day of discharge, during which some patients were busy with settling bills, so the readiness may not be truly assessed. The financial aspect of the patient is not mentioned in the tool.

#### **Conclusion**

This study reveals that experimental group (55.5%) have high discharge readiness while control group (70.3%) have low discharge readiness. There was a highly significant difference between the discharge readiness among control and experimental group.

No adverse effect reported by the patients during the course of study. Thus, the research process was a great learning experience as well as enriching and beneficial to the investigators. The study has thrown light on the importance of readiness for hospital discharge. Encouragement from the guide leads to a successful completion of the study.

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