**Research Artícle** 

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# A STUDY TO ASSESS THE EFFECTIVENESS OF INFORMATION EDUCATION COMMUNICATION PACKAGE ON LEVEL OF KNOWLEDGE REGARDING COMPLICATIONS OF DIABETES MELLITUS AMONG PATIENTS WITH DIABETES MELLITUS"AT SRM GENERAL HOSPITAL, KATTANKULATHUR

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### ABSTRACT

Introduction: Diabetes mellitus is a group of metabolic diseases in which a person has high blood sugar, either because the body does not produce enough insulin, or cells do not respond to the insulin that is produced. Objective: The aim of the study is to improve the level of knowledge on complications of diabetes mellitus among diabetes mellitus patients. Methods: A quasi experimental study to assess the effectiveness of information education communication package on knowledge regarding complications of diabetes mellitus among patients with diabetes mellitus The 60 study samples selected by non-probability sampling technique. After getting the written consent samples was allocated into two groups. Experimental group(30 patients) were provided with pretest, IEC Package and posttest, the control group (30patients) were provided with the pretest and posttest without any intervention. The data collected with the help of demographic data and self-structured questionnaire regarding complications of diabetes mellitus. **Result**: The study result showed that posttest knowledge score of control group shows 54.877%, the experimental group shows that 81.33%. Experimental group those who received IEC package on complications of Diabetes mellitus 'p' value 0.0001 is more significant than control group 'p' value 0.003. Result shows experimental group who received IEC package have more knowledge than control group. The study concludes that diabetic clients have a remarkable increased in knowledge regarding complications of Diabetes mellitus after implementation of Information Education Communication package. As members of the health team, nurses play a vital role in improving knowledge of patient regarding complications of diabetes mellitus.

KEYWORDS: Diabetes mellitus, Effectiveness, Information, Education, Communication.

## INTRODUCTION

Diabetes mellitus is a group of metabolic diseases in which a person has high blood sugar, either because the body does not produce enough insulin, or cells do not respond to the insulin that is produced. This blood sugar produces the classical symptoms of polyuria (frequent urination), polydipsia(increased thirst) and polyphagia (increased hunger). Currently, India is the diabetes capital of the world. It is estimated that by 2025 number will grow to 70 million. In other words, 1 in every 5 diabetes in the world will live in India. Diabetes is the number one cause of kidney failure; it is responsible for 5% of blindness in adults and 1 million limb amputations. The countries with the largest number of Diabetic people will be India, China and USA by 2030. Studies have shown that better control of blood sugar, cholesterol, and blood pressure levels in persons with

diabetes helps reduce the risk of kidney disease, eye disease, nervous system disease, heart attack and stroke.

### Aims

This study aimed to improve the level of knowledge on complications of diabetes mellitus among diabetes mellitus patients.

## **OBJECTIVES**

- Assess the pretest level of knowledge regarding complications of diabetes mellitus among patients in experimental and control group.
- Assess the posttest level of knowledge regarding complications of diabetes mellitus in experimental and control group.
- Compare the pretest and posttest level of knowledge regarding complications of diabetes Mellitus between experimental and control group.

• Associate the posttest level of knowledge regarding complications of diabetes mellitus in experimental and control group with their selected demographic variables.

Non probability convenient sampling for selecting a sample.30 sample were in control group and 30 sample were in experimental group. For the Patient in experimental group were given pretest, IEC package on complication of diabetes mellitus and posttest. Controls were given pretest and posttest without any intervention.

### METHODOLOGY

Quasi experimental research design was adopted, and sample were selected in SRM general hospital by using

Table 1: Distribution Of Knowledge Of Pretest And Post Test Level	Of Experimental Group.

E-monimental group	Experimental Gr	oup Pre Test	<b>Experimental Group Post Test</b>		
Experimental group	Frequency	Percent	Frequency	Percent	
Inadequate knowledge	12	40.0	0	0	
Moderately adequate knowledge	16	53.3	7	23.3	
Adequate knowledge	2	6.7	23	76.7	
Total	30	100.0	30	100.0	

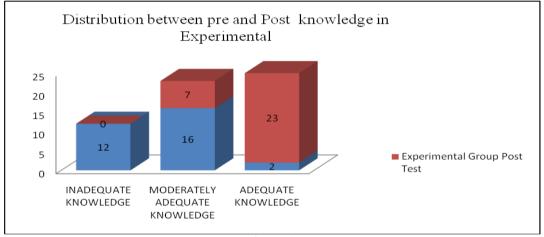
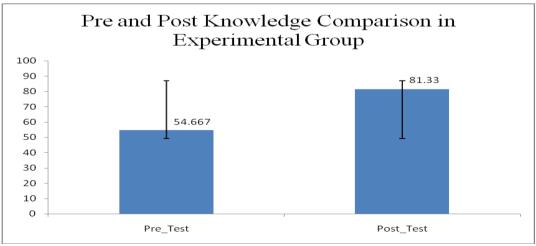


Figure 1:

Table 2: Comparison Between Pre And Post Test Level Of Knowledge In Experimental Group.

Experimental	Ν	Mean	Std. Deviation	Paired t Value	P Value
Pre_Test	30	54.667	14.8703	- 13.185	0.0001
Post_Test	30	81.330	9.3740	- 13.185	***





Control Chorne	Pre T	est	Post Test	
Control Group	Frequency	Percent	Frequency	Percent
Inadequate knowledge	20	66.7	13	43.3
Moderately adequate knowledge	10	33.3	16	53.3
Adequate knowledge	0	0	1	3.3
Total	30	100.0	30	100.0

### Table 3: Distribution Between Pre And Post Test Level Of Knowledge In Control Group.

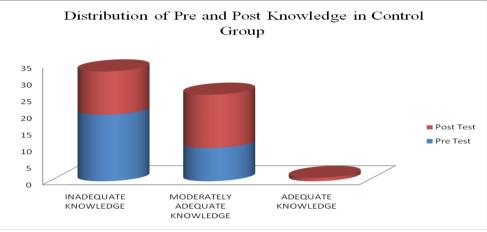


Figure 3:

### Table 4: Comparisons Between Pre And Post Test Level Of Knowledge In Control Group.

Control	Ν	Mean	Std. Deviation	Paired t value	P value
Pre-test	30	45.430	12.8471	- 3.245	0.003
Post-test	30	54.877	13.6675	- 3.243	**

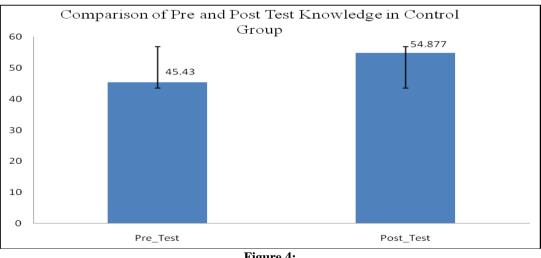
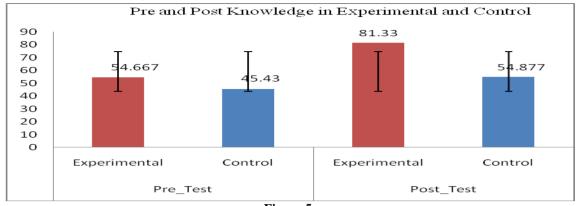


Figure 4:

## Table 5: Pre And Post Test Knowledge Level Comparison In Experimental And Control.

	Groups	Ν	Mean	Std. Deviation	't" Value	P Value
Pre_Test	Experimental	30	54.667	14.8703	2.574	0.013
	Control	30	45.430	12.8471	2.374	*
Post_Test	Experimental	30	81.330	9.3740	8.742	0.0001
	Control	30	54.877	13.6675	8.742	***





### **Description of the Tool**

Socio demographic questionnaire prepared by the investigator to obtain the baseline information Structured questionnaire to assess level of knowledge regarding complications of diabetes mellitus among patients with diabetes mellitus. There are of 30 items to assess the level of knowledge regarding complications of diabetes mellitus.

#### **Ethical Considerations**

The investigator took written consent from the patients by explaining the purpose of the information and the confidentiality mentioned and tit will be used for the purpose of research.

### **Statistical Methods**

The collected data was tabulated and analyzed using both descriptive and inferential statistics.

The descriptive statistical analysis method such as mean, standard deviations and inferential statistics

### RESULT

The result of the study showed that posttest knowledge score of control group shows 54.877%, the experimental group shows that 81.33%. Experimental group those who received IEC package on complications of Diabetes mellitus 'p' value 0.0001 is more significant than control group 'p' value 0.003. Result shows experimental group who received IEC package have more knowledge than control group.

#### CONCLUSION

This study has proved that diabetic clients have a remarkable increased in knowledge regarding complications of Diabetes mellitus after implementation of IEC package.

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