



# “Effectiveness Of Psychoeducation Programme On Knowledge Of Schizophrenia Among Caregivers Of Patients With Schizophrenia In Tertiary Care Hospital Of The City.”

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## Abstract:

**Introduction:** Schizophrenia is most devastating mental illness in all over the world. Taking care for this patient is very challenging burden on the family members.

**Objectives:** The objectives of the study is to assess effectiveness of psychoeducation programme on knowledge of Schizophrenia among caregivers of patients with Schizophrenia

**Methodology:** Pre-experimental one group pre-test post-test study design was used for the study. Total ninety (90) caregivers of patients with Schizophrenia were selected as sample for the study by using non-probability convenient sampling method. The data was collected by using socio-demographic profile and self-structured knowledge questionnaires.

**Result:** Finding of the study revealed that the one third of the caregivers (33.11%) had poor knowledge about knowledge of Schizophrenia prior to intervention. psychoeducation was highly effective in improving knowledge of caregivers of patients with Schizophrenia that is 96.67 % of the samples had excellent level of knowledge score. ( $p < 0.05$ ).

**Conclusion:** Study concluded that Psychoeducation programme is significantly effective in increasing knowledge of Schizophrenia among caregivers of patients with Schizophrenia. Mental health nurse should regularly educate and counsel the family members of patient regarding schizophrenia.

**Keywords -** Effectiveness, Psychoeducation, knowledge, caregivers, tertiary care hospital.

## I. INTRODUCTION

Schizophrenia is most devastating mental illness in all over the world. Taking care for this patient is very challenging burden on the family member's .now a days there are various advance treatment modalities to reducing the rate of long term hospitalization. In the treatment process role of patient and family member is very important. Hence the related problems more in environment which affect the daily life of patient. There are various treatment modalities aims to improve the function of patient and supporting the family members to deal with the patients problems to gain more attention it include the patient and family psychoeducation and other social work activities etc. Thus the psychoeducation programs are very important and helpful in the treatment of Schizophrenia, mainly through reduction of the expressed emotion and early detection of the relapse symptoms. Family psychoeducation is one of the most effective intervention in management of patient. There are various studies have shown that psychoeducation of family members of patients with schizophrenia regarding Schizophrenia disease process and of the home care not only enhance the social and global functions of the patients but also improve the quality of life for both of them. Psychoeducation program also reflect in the different needs and attitudes of those

tending the education. Psychoeducation program should be based on the needs of patients and family members.<sup>3</sup> These caregivers need their own support, because caring for someone with severe mental illness takes its toll. Studies have found that caregivers struggle with several issues to a greater degree than those who do not care for a loved one with mental illness, including financial difficulties, physical health problems, disruption of routine and social life, stigma, stress. Depression and substance use. But caregivers of schizophrenia patients can take active steps to reduce this burden and enjoy a better quality of life.

Participation in the psychoeducation program is one important action that can help both the caregivers and entire family better communication skills, expanded social network and also providing effective ways to cope and support their patients. On the basis of some researches has found that psychoeducation was effective as part of treatment used for family members and patients with mental illness also found that fewer relapses and recurrences of symptoms and better overall wellbeing and satisfaction for everyone in the family.

## II. Review of Literature:

The investigator will be divided in to following headings.

- a. The literature related to prevalence of Schizophrenia.
- b. The Literature related to knowledge of schizophrenia among the caregivers.
- c. The literature related to burden and impact of schizophrenia among caregivers.
- d. The literature related to effectiveness of psychoeducation programme.

### a) The literature related to prevalence of Schizophrenia. -

**Cho SJ, Kim J, Kang YJ(2020)** This study was conducted to address the incidence and prevalence of schizophrenia and similar psychosis in South Korea with Health Insurance Review and Assessment (HIRA) database. Methods used for this study was HIRA database, which includes diagnostic information cases with diagnosis of schizophrenia and schizophrenia-similar disorders (SSP), including schizophrenia form, acute/transient psychotic disorders, schizoaffective disorders etc. The annual prevalence and incidence were calculated using the population data from the Korean Statistical Office. Result of this study was the annual incidence rates (IR) of SSP between 2010 and 2015 were 118.8–148.7 per 100,000 person per year . For schizophrenia, IR per 100,000 PY were 77.6–88.5 between 2010 and 2015. The study was concluded that the annual incidence of SSP and schizophrenia was found to steadily increase and was higher than that of other countries. The high incidence rate observed in the current study needs to be studied further.

### b. The Literature related to knowledge of schizophrenia among the caregivers.

**Zhou Z, Wang Y (20121)** The study was conducted on Caregiving Knowledge and Skills With Caregiver Burden, Psychological Well-Being, and Coping Styles Among Primary Family Caregivers of People Living With Schizophrenia in China. Aim of this study was conducted on associations of Caregiving Knowledge and Skills with Caregiver Burden, Psychological Well-Being, and Coping Styles Among Primary Family Caregivers of People Living With Schizophrenia in China. Methods were used cross-sectional study. Sample size used for this study was a total of 395 primary family caregivers .Results of this study was a higher level of caregiving knowledge and skills was positively correlated with less stress ( $b = -0.48, P < 0.001$ ), anxiety ( $b = -0.23, P = 0.029$ ), depression ( $b = -0.29, P = 0.013$ ), and more caregiving rewarding feelings ( $b = 0.54, P < 0.001$ ). Also, caregivers with more knowledge and skills were more inclined to adopt positive coping strategies ( $b = 0.44, P < 0.001$ ). Despite these differences, caregivers with different levels of caregiving knowledge and skills reported comparable caregiver burden ( $b = 0.11, P = 0.705$ ) and the use of a passive coping style ( $b = 0.10, P = 0.169$ ). The study was concluded that Caregiving knowledge and skills are a reliable predictor of psychological well-being and active coping among the primary family caregivers of PLSs.

### c. The literature related to burden and impact of schizophrenia among caregivers.

**Tamizi Z, Fallahi-Khoshknab M (2020)** The study was conducted on Caregiving burden in family caregivers of patients with schizophrenia: A qualitative study. Aim of this study was to gain a better understanding of caregiving burden in family caregivers of patients with schizophrenia and its related factors. Materials and methods was used for this qualitative study was performed based on 12 family caregivers of schizophrenia patients visiting a psychiatric hospital in Tehran in 2018. Sampling was carried out based on the purposive sampling method and was continued until data saturation. All interviews were recorded, transcript, and imported into the MAXQDA software. Then, qualitative content analysis was conducted based on Graneheim and Lundman's five-step method. Results of the study was the "Perceived objective burden" as theme included two main categories: "Heavy involvement of caregivers" and "Challenges of the healthcare system. The study was concluded that the family caregivers of the patients

with schizophrenia encounter many problems related to multiple responsibilities in the caring process and challenges in the provision of mental health-care services.

#### **d. The literature related to effectiveness of psychoeducation programme.**

**Verma PK, Walia TS (2019)** The was conducted on Family psychoeducation with caregivers of schizophrenia patients: Impact on perceived quality of life. The aim of this study was to assess the efficacy of family psychoeducation intervention on the caregivers of schizophrenia patients with respect to their perceived quality of life. Materials and methods of this study was purposive sampling technique .Sample size was total of 30 caregivers of male schizophrenia patients were selected through purposive sampling technique. Patients were divided into two groups, namely, experimental and control group. Family psychoeducation intervention was given on twice-monthly basis for 6 months to the experimental group caregivers. Baseline assessment was carried out with the help of WHO Quality of Life-BREF followed by intervention and then post therapeutic assessment was done with same tool. Results of the study was most of the caregivers were above 40 years of age group, married, and male. Following family psychoeducation, significant improvement in overall quality of life scores was observed in experimental group caregivers compared to control group caregivers where no such intervention was provided. This study was concluded that Family psychoeducation is feasible and useful in our clinical population.

### **III. NEED FOR THE STUDY**

Researcher came to know there are maximum number of cases of Schizophrenia found in ward and out patient department. There are maximum rate of relapse in patient with Schizophrenia due to drug drop out, lack of knowledge to caregivers and patient, lack of family support, economical problems etc. So there is need to provide complete knowledge about disease condition of Schizophrenia and home care management to caregivers of patients with Schizophrenia.

Schizophrenia is the most common of all psychiatric disorder and is prevalent in all cultures across the world about 15% of new admission in mental hospitals are schizophrenic patient. It has been estimated that patients diagnose as having schizophrenia occupy 50% of all mental hospital bed.

About three to four per 1000 in every community suffer from schizophrenia about 1% of general population stand the risk of developing this disease in their lifetime schizophrenia is equally prevalent in men and women the peak ages of onset are 15 to 25 years for men and 25 to 35 years for women.

### **IV. OBJECTIVES OF THE STUDY ARE:**

- 1) To assess the knowledge of Schizophrenia among caregivers of patients with Schizophrenia in tertiary care hospital of city.
- 2) To assess effectiveness of psychoeducation programme on knowledge of Schizophrenia among caregivers of patients with Schizophrenia in tertiary care hospital of city.
- 3) To find the association between study findings with selected demographic variables.

### **V. HYPOTHESIS**

**H<sub>0</sub>:** There is no significant effect of psychoeducation programme on knowledge of Schizophrenia among the caregivers of patients with Schizophrenia in tertiary care hospital of the city” (P=0.05)

**H<sub>1</sub>:** There is significant effect of psychoeducation programme on knowledge of Schizophrenia among the caregivers of patients with Schizophrenia in tertiary care hospital of the city”. (P=0.05)

### **VI. RESEARCH METHODOLOGY**

**(i) RESEARCH APPROACH:** Quantitative research approach was used. It helps the investigator in selection of participants, manipulation of independent variables, control, observation to be made and the type of statistical analysis to be used, to interpret the data.

**(ii) RESEARCH DESIGN:** In this study, a one group pre-test and post-test (pre experimental) design is used to observe the effectiveness of psychoeducation programme on knowledge of Schizophrenia among caregivers of patients with Schizophrenia.

**(iii) SETTING OF THE STUDY:** The study was conducted in tertiary care hospital of the city.

**(iv) POPULATION:** The accessible population refers to the caregivers of patients with schizophrenia in selected tertiary care hospital of city.

**(v) SAMPLE AND SAMPLING TECHNIQUE:** In present study, non -probability convenient sampling method was used to select 90 caregivers of patients with schizophrenia in selected tertiary care hospital of city.

**(vi) TOOL:** The tool used in research study for data collection were:

**Section I:** Demographic profile of caregivers of patients with Schizophrenia...

This tool consists of 11 items on personal information to find out any association between selected demographic variables and study findings. It consists of background variables such as age, gender, education, religion, income, type of family, residential place, length of stay with patient, relation with patient, mental illness in family other than patient and source of knowledge about mental illness.

**Section II: self-structured** questionnaire on knowledge of Schizophrenia.

The self-structured questionnaire was developed into only one section to assess the knowledge of Schizophrenia among caregivers of patients with Schizophrenia. Questionnaire dealt with objective type (multiple type questions) items. The scores of the Section II were based on worth of correct answers. The correct response was given '1' and the incorrect response was given '0'. Knowledge was graded from poor knowledge to excellent knowledge. In the self- structured questionnaire for each question, four options were given out of which 3 were distracters and one was the correct response. The highest score was **30**.

In this study, the reliability was determined by administering self-structured knowledge questionnaire to 10 caregivers of patients with Schizophrenia in selected tertiary care hospital of the city. The reliability was calculated by using the test retest method. The reliability was confirmed by using coefficient alpha test. The result was:  $r = 0.87$  It shows that the tool was reliable.

## VII DATA COLLECTION PROCESS:

Before the actual data collection, the investigator had completed the following formalities:

1. Approval from the research committee member & written permission from head of the institution to conduct research.
2. The investigator introduced self, explained the study of the purpose to the caregivers of patients with Schizophrenia in selected tertiary care hospital of the city.

The data was collected .Prior the data collection permission was obtained from the authorities. The purpose of the study and method of data collection was explained to the subjects for getting true responses. The assurance was given regarding the confidentiality of the information. An informed consent was obtained from the respondents indicating their willingness to participate in the study. The subjects who fulfill the sampling criteria were taken for the study. Total 90 samples were selected by Non-probability convenient sampling method. The data was collected from the caregivers of patients with Schizophrenia in selected tertiary care hospital of the city.

Investigator administered self-structured questionnaire on knowledge of Schizophrenia to obtain pre-test score and investigator conducted psychoeducation programme on knowledge of Schizophrenia as intervention, later post test was conducted with the same questionnaire. After the data gathering process the investigator thanked all the study subjects as well as the authority persons for their cooperation.

The total 90 caregivers were divided according to their convenience. One the day one pre-test and psychoeducation programme was administered and on day 7<sup>th</sup> post test was conducted.

**(vii) Statistics Used:** It includes descriptive and inferential statistics. Data analysis performed by using SPSS 25.0 (Statistical Package for Social Sciences)

## VIII. RESULTS AND DISCUSSION

### STUDY INSTRUMENT

<b>Section I</b>	:	Description of the caregivers of patients with Schizophrenia according to their demographic Variables.
<b>Section II</b>	:	Assessment of knowledge score of caregivers of patients with Schizophrenia regarding Schizophrenia
<b>Section III</b>	:	Evaluate the effectiveness of Psycho-education Programme on Schizophrenia
<b>Section IV</b>	:	Level of knowledge score of subject's pre and post -test.
<b>Section V</b>	:	Associate knowledge of caregivers of patients with Schizophrenia with demographic variables.
<b>Section VI</b>	:	Hypothesis testing.

### SECTION I

**Table 4.0: Percentage wise distribution of caregivers of patients with Schizophrenia according to their demographic characteristics**

Sr. No.	Demographic Variables	No. of Caregivers	Percentage
	<b>n=90</b>		
<b>1.</b>	<b>Age (yrs)</b>		
	21-30 years	18	20.00
	31-40 years	22	24.40
	41-50 years	21	23.30
	51-60 years	29	32.20
<b>2.</b>	<b>Gender</b>		
	Male	42	46.70
	Female	48	53.30
	Transgender	00	00
<b>3.</b>	<b>Educational Status</b>		
	Primary	41	45.60
	Secondary	27	30.00
	Higher Secondary	13	14.40
	Graduation	08	08.90
	Post -graduation	01	01.10
<b>4.</b>	<b>Religion</b>		
	Hindu	73	81.10
	Muslim	15	16.70

	Christian	02	02.20
	Other	00	00
<b>5</b>	<b>Total Monthly Income of Family</b>		
	Less than 10,000/-	46	51.10
	10001 /- to 20,000/-	28	31.10
	20001/- to 30,000/-	07	07.80
	30001/- to 40,000/-	02	02.20
	>40,001/-	07	07.80
<b>6</b>	<b>Type of Family</b>		
	Joint family	12	13.30
	Nuclear family	74	82.20
	Separated family	04	04.40
<b>7</b>	<b>Area of Living</b>		
	Urban	62	68.90
	Rural	28	31.10
<b>8</b>	<b>Length of Stay with Patient</b>		
	6 months – 11 month	03	03.30
	12 month – 2 years	08	08.90
	Above 2 years	79	87.80
<b>9</b>	<b>Relation with Patient</b>		
	Parent	33	36.70
	Spouse	11	12.20
	Sibling	04	04.40
	Grandparents	01	01.10
	Other	41	45.60
<b>10</b>	<b>History of Psychiatric illness in family</b>		
	Yes	18	20.00
	No	72	80.00
<b>11</b>	<b>Source of Information Accessed</b>		
	Mass media	04	04.40
	Peer group	06	06.70
	Medical professional	78	86.70
	Other	02	02.20

## SECTION II

### ASSESSMENT OF KNOWLEDGE SCORE OF SCHIZOPHRENIA.

This section deals with the analysis of the data related to knowledge of caregivers of patients with Schizophrenia regarding Schizophrenia before and after implementation of Psycho-education Programme. The statistical values of means, mean score percentages and standard deviations are used to describe the scores.

**Table 4.12: Assessment of Knowledge score of caregivers of patients with Schizophrenia regarding Schizophrenia before giving Psycho-education Programme.**  
n=90

Category	Maximum score	Mean	Standard deviation	Mean percentage
Knowledge Score	27	15.10	5.31	50.33

The above table 4.12 depicts that the result of pre- test knowledge score level regarding Schizophrenia among caregivers of patients with Schizophrenia. In pre- test the mean knowledge score was 15.10. Mean percentage was 50.33. It reveals that the samples had average knowledge before giving Psycho-education Programme regarding Schizophrenia.

**Table 4.13: Assessment of Knowledge score of caregivers of patients with Schizophrenia regarding Schizophrenia after giving Psycho-education Programme.**  
n = 90

Category	Maximum score	Mean	Standard deviation	Mean percentage
Knowledge Score	30	25.98	2.52	86.60

The above table 4.13 depicts that the result of post- test knowledge score level regarding Schizophrenia among caregivers of patients with Schizophrenia. In post-test mean knowledge level regarding Schizophrenia was 25.98 and mean percentage was 86.60. it reveals that the samples had excellent knowledge.

## SECTION III

### EVALUATE THE EFFECTIVENESS OF PSYCHO-EDUCATION PROGRAMME ON SCHIZOPHRENIA.

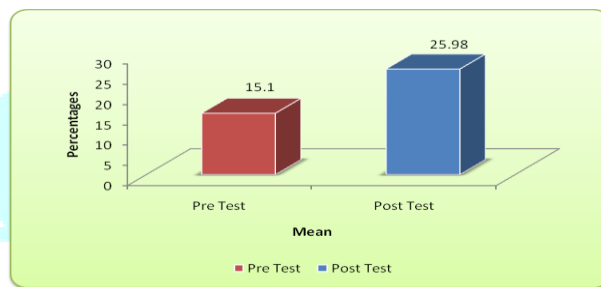
This section deals with evaluation of effectiveness of Psycho-education Programme regarding Schizophrenia. This includes comparison of pre- test and post- test means, SD, and mean percentage knowledge scores. The levels of knowledge during the pretest and posttest are compared to prove the effectiveness of Psycho-education Programme. Significance of difference of knowledge scores of caregivers of patients with Schizophrenia at 5% level of significance is tested with paired 't' test. Also the calculated 'p' values are compared with acceptable 'p' value, i.e. 0.05.

**Table 4.14: Significance of knowledge score regarding Schizophrenia of caregivers of patients with Schizophrenia before and after Psycho-education Programme.**

Overall	Maximum score	Mean	Standard deviation	Mean percentage	t-value	p-value
Pre Test	27	15.10	5.31	50.33	21.29	0.000 S, p<0.05
Post Test	30	25.98	2.52	86.60		

**(S = Significant at 0.05 level of significance)**

The above table 4.14 depicts that in the pre -test the mean of the knowledge score obtained by the sample was 15.10 and in the post test it rise to 25.98. The knowledge score of the sample shows marked improvement after giving Psycho-education Programme. From the above table, it is evident that the calculated 't' value is greater than the table value of 't' at 0.05 level. This indicates that Psycho-education Programme is effective in improving the knowledge of the caregivers of patients with Schizophrenia.



**Figure 4.12: Significance of knowledge score regarding Schizophrenia of caregivers of patients with Schizophrenia before and after Psycho-education Programme.**

#### SECTION IV

#### LEVEL OF KNOWLEDGE SCORE OF SUBJECTS PRE AND POST TEST

This section deals with the analysis of data to determine the level of pretest and post -test knowledge score of the sample. Association of level of knowledge score is calculated by using Chi-square test.

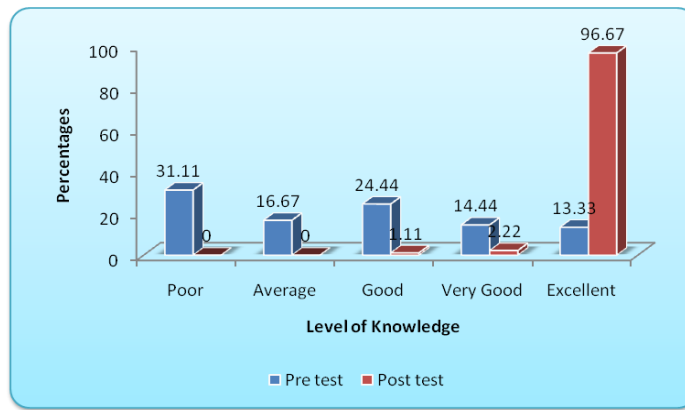
**Table 4.15: Level of knowledge score of subject's pre and post test**

Level of Knowledge Score	Pre test		Post test		$\chi^2$ value	p-value
	f	%	f	%		
Poor	28	31.11	00	00	13.21	p <0.0001, Significant
Average	15	16.67	00	00		
Good	22	24.44	01	1.11		
Very Good	13	14.44	02	2.22		
Excellent	12	13.33	87	96.67		

**(Significant at 0.05 level of significance)**

The table no.4.15 depicts that, In pre- test 31.11 % of the samples had poor level of knowledge score, 16.67 % had average level of knowledge score and 24.44 % of samples were having good level of knowledge. In post -test 2.22 % of the samples had good level of knowledge score and 96.67 % of the samples had excellent level of knowledge score. The difference between pre -test and post- test level of knowledge score is found to be statistically significant ( $\chi^2$ -value= 13.21).





**Figure 4.13: Distribution of caregivers of patients with Schizophrenia with regards to general assessment**

### SECTION- V

#### ASSOCIATION OF KNOWLEDGE SCORE OF CAREGIVERS OF PATIENTS WITH SCHIZOPHRENIA IN RELATION TO DEMOGRAPHIC VARIABLES

This section deals with significance of difference of post- test knowledge score in relation to their age, gender, educational status, religion and so on.

- Two group comparisons are done by using the t test.
- Three group comparisons are done by using the one way ANOVA.

**Table 4.16: Significance of difference of knowledge on Schizophrenia in relation to age n=90**

Age (yrs)	No. of caregivers	Post -test knowledge	F-value	p-value
21-30 years	18	26.05 ± 2.18	0.19	0.90 NS, p>0.05
31-40 years	22	26.09 ± 2.56		
41-50 years	21	25.61 ± 2.29		
51-60 years	29	26.13 ± 2.92		

(NS = Not Significant)

In the above mentioned table no.4.16 by applying one way ANOVA to associate knowledge with age, in which F-value is 0.19 and p-value= 0.90, which is more than 0.05, hence no significant difference is found in various age groups of caregivers of patients with Schizophrenia.

**Table 4.17: Significance of difference of knowledge on Schizophrenia in relation to Gender n=90**

Gender	No. of caregivers	Post -test knowledge	t-value	p-value
Male	42	26.76 ± 2.53	7.96	0.00 S, p>0.05
Female	48	25.31 ± 2.33		
Transgender	00	00 ± 00		

(S = Significant)

The table no 4.17 depicts that there is significant difference is found in the Gender. As t value is 7.96 and p-value is 0.00 is lesser than 0.05, hence it is significant.

**Table 4.18: Significance of difference of knowledge on Schizophrenia in relation to Educational status**

**n=90**

Educational status	No. of caregivers	Post- test knowledge	F-value	p-value
Primary	41	25.34 ± 2.54	2.26	0.06 NS, p>0.05
Secondary	27	26.18 ± 2.20		
Higher Secondary	13	26.38 ± 2.98		
Graduation	08	27.50 ± 1.69		
Post -graduation	01	30.00 ± 0		

**(NS = Not Significant)**

In the above mentioned table no. 4.18 by applying one way ANOVA to associate knowledge with educational status, in which F-value is 2.26 and p-value= 0.06, which is more than 0.05, hence it is not significant difference found.

**Table 4.19: Significance of difference of knowledge on Schizophrenia in relation to Religion**

**n=90**

Religion	No. of caregivers	Post- test knowledge	f-value	p-value
Hindu	73	26.21 ± 2.53	2.39	0.09 NS, p>0.05
Muslim	15	24.73 ± 2.28		
Christian	02	27.00 ± 1.41		
Other	00	00 ± 00		

**(NS = Not Significant)**

In the above mentioned table no 4.19 by applying one way ANOVA to associate knowledge with religion, in which f-value is 2.39 and p-value= 0.09, which is more than 0.05, hence not significant difference found in religion and knowledge of caregivers.

**Table4. 20: Significance of difference of knowledge on Schizophrenia in relation to Total Monthly Income of Family**

**n=90**

Total Monthly Income of Family	No. of caregivers	Post- test knowledge	F-value	p-value
Less than 10,000/-	46	25.93 ± 2.28	2.60	0.04 S, p>0.05
10001 /- to 20,000/-	28	25.57 ± 2.21		
20001/- to 30,000/-	07	28.71 ± 1.11		
30001/- to 40,000/-	02	24.50 ± 3.53		
>40,001/-	07	25.71 ± 4.42		

**(S = Significant)**

In the above mentioned table no 4.20 by applying one way ANOVA to associate knowledge with total monthly income of family, in which F-value is 2.60 and p-value= 0.04, which is less than 0.05, hence significant difference found in total monthly income with knowledge of caregivers.

**Table 4.21: Significance of difference of knowledge on Schizophrenia in relation to Type of Family**

**n=90**

Type of Family	No. of caregivers	Post -test knowledge	F-value	p-value
Joint family	12	26.50 ± 2.64	0.55	0.57 NS, p>0.05
Nuclear family	74	25.95 ± 2.54		
Separated family	04	25.00 ± 1.82		

(NS = Not Significant)

In the above mentioned table no.4.21 by applying one way ANOVA to associate knowledge with type of family, in which F-value is 0.55 and p-value= 0.57, which is more than 0.05, hence no significant difference is found in type of family with knowledge of caregivers of patients with Schizophrenia.

**Table 4.22: Significance of difference of knowledge on Schizophrenia in relation to Area of Living**

**n=90**

Area of Living	No. of caregivers	Post- test knowledge	t-value	p-value
Urban	62	26.00 ± 2.45	0.004	0.95 NS, p>0.05
Rural	28	25.96 ± 2.71		

(NS = Not Significant)

The table no.4.22 depicts that there is no significant difference found in the area of living. As t value is 0.004 and p-value is 0.95 is greater than 0.05, hence no significant difference found in area of living with knowledge of caregivers.

**Table 4.23: Significance of difference of Post knowledge on Schizophrenia in relation to Length of Stay with Patient**

**n=90**

Length of Stay with Patient	No. of caregivers	Post- test knowledge	F-value	p-value
6 months – 11 month	03	25.00 ± 2.64	0.73	0.48 NS, p>0.05
12 month – 2 years	08	26.87 ± 1.80		
Above 2 years	79	25.93 ± 2.58		

(NS = Not Significant)

In the above mentioned table no.4.23 by applying one way ANOVA to associate knowledge with length of stay with patients, in which F-value is 0.73 and p-value= 0.48, which is more than 0.05, hence it is no significant association found in length of stay with patients with knowledge of caregivers.

**Table 4.24: Significance of difference of knowledge on Schizophrenia in relation to Relation with Patient**

**n=90**

Relation with Patient	No. of caregivers	Post- test knowledge	f-value	p-value
Parent	33	25.60 ± 2.96	1.54	0.19 NS, p>0.05
Spouse	11	25.36 ± 2.11		
Sibling	04	25.00 ± 4.24		
Grandparents	01	30.00 ± 00		
Other	41	26.36 ± 1.92		

(NS = Not Significant)

In the above mentioned table 4.24 by applying one way ANOVA to associate knowledge with relation with patient, in which f-value is 1.54 and p-value= 0.19, which is more than 0.05, hence no significant association found in relation with patient with knowledge of caregivers.

**Table 4.25: Significance of difference of knowledge on Schizophrenia in relation to History of Psychiatric illness in family**

n=90				
History of Psychiatric illness in family	No. of caregivers	Post- test knowledge	F-value	p-value
Yes	18	26.00 ± 0.56	0.000	0.91 NS, p>0.05
No	72	25.98 ± 2.57		

(NS = Not Significant)

In the above mentioned table 4.25 by applying one way ANOVA to associate knowledge with History of Psychiatric illness in family, in which F-value is 0.00 and p-value= 0.91, which is more than 0.05, hence no significant association found in History of Psychiatric illness in family with knowledge of caregivers.

**Table 4.26: Significance of difference of knowledge on Schizophrenia in relation to Source of Information Accessed**

n=90				
Source of Information Accessed	No. of caregivers	Post -test knowledge	F-value	p-value
Mass media	04	23.25 ± 5.18	1.68	0.17 NS, p>0.05
Peer group	06	26.00 ± 2.52		
Medical professional	78	26.12 ± 2.34		
Other	02	26.00 ± 00		

(NS = Not Significant)

In the above mentioned table 4.26 by applying one way ANOVA to associate knowledge with Source of Information Accessed, in which F-value is 1.68 and p-value= 0.17, which is more than 0.05, hence no significant association found in Source of Information Accessed with knowledge of caregivers.

## SECTION- VI HYPOTHESIS TESTING

In order to determine the effectiveness of Psycho-education Programme on knowledge Schizophrenia among caregivers of patients with Schizophrenia, two research hypothesis were formulated. In order to test the research hypothesis 't' values were computed.

**H<sub>0</sub>:** There is no significant effect of psycho-education programme on knowledge of Schizophrenia among the caregivers of patients with Schizophrenia in tertiary care hospital of the city.

**H<sub>1</sub>:** There is significant effect of psycho-education programme on knowledge of Schizophrenia among the caregivers of patients with Schizophrenia in tertiary care hospital of the city.

The 't' value between pre and post-test computed for knowledge on Schizophrenia and presented in table 4.14 and Table 4.15, indicates that there is a significant improvement in scores from pre to post test at 5 % level i.e. p<0.05. Hence Research Hypothesis H<sub>0</sub> is rejected and H<sub>1</sub> is accepted.

## IX . SUMMARY:

This chapter deals with the analysis and interpretation of data collected from Ninety(90) caregivers of patients with Schizophrenia, who were admitted in tertiary care hospital of the city to assess the effectiveness of Psycho-education Programme on knowledge of caregivers of patients with Schizophrenia regarding Schizophrenia.

There is a significant improvement in scores from pre to post test at 5 % level i.e.  $p < 0.05$ . Hence Research Hypothesis  $H_0$  is rejected and  $H_1$  is accepted.

## X. DISCUSSION WAS DONE IN FOLLOWING SUBHEADINGS:

Age Shows that among 90 samples, age of the samples 20% (18) of the samples age between 21 to 30 years, 24.40%(22) of the sample age between 31 to 40 years, 23.30%(21) of the sample age between 41-50 years, 32.20%(29) of the sample age between 51 to 60 years.

Gender distribution shows that 46.70% (42) of the sample were male, 53.30%(48) of the sample were female, no one transgender in sample distribution.

Education distribution shows that 45.70%(41) had completed primary education, 30.00%(27) had completed secondary education, while 14.40%(13) had completed higher secondary education, 08.90%(08) had completed graduation and 01.10%(01) had completed post-graduation.

Religion shows that among 90 samples, religion of the samples 81.10 % ( 73) are Hindu, 16.70%(15) were Muslim and 02.20% were Christian.

Total monthly income of family Shows that 51.10%(46) of the samples had income is less than 10,000, 31.10%(28) of the samples had income is between 10001 to 20,000, 07.80%(07) of the samples had income is between 20001 to 30,000, 02.20%(02) of the samples had income is between 30001 to 40,000 and 07.80%(07) of the samples had income is more than 40001.

Type of family Among the total samples 13.30% (12) of the samples from joint family, 82.20% (74) of the samples from nuclear family and 04.40%(04) of the samples from separated family.

Area of living shows that among 90 samples, 68.90% (62) of the samples living in urban area while 31.10% (28) of the samples living in rural area.

Length of stay with patient Distribution of samples shows that 03.30% (03) of the sample were stay with patient is between 6 month to 11 month, 08.90%(08) of the samples were stay with patient is between 12 month to 2 years and 87.80%(79) of the samples were stay the patient is more than two years.

Relation with patient Distribution of sample shows that 36.70%(33) of samples were parent of the patient. 12.20%(11) of the samples were spouse of the patient. 04.40%(04) of the samples were of the patients sibling. 01.10%(01) of the samples were grandparent of the patient and 45.60%(41) of the samples were other like daughter, son etc relation with patient.

Distribution of sample according to history of psychiatric illness in family shows that, 20.00% (18) of samples was present history of psychiatric illness in family and 80.00 % ( 72) of samples was not having any psychiatric illness in their family.

Distribution of sample according to Source if information accessed depicted that 04.40% (04) of samples were gain information from mass media. 06.70 % (78) of the samples were gain information from peer group. 86.70%(78) of the samples were gain information from medical professional and 02.20%(02) of the samples were gain information from other sources.

Pre-test projected that 31.11% of caregivers had poor (0-6) knowledge about schizophrenia. 16.67% of caregivers had average (7-12) knowledge about schizophrenia. 24.44% of caregivers had good (13-18) knowledge. 14.44% of caregivers had very good (19-24) knowledge. 13.33 of caregivers had excellent (25-30) knowledge about schizophrenia.

While in post -test 31.11% of caregivers had good, as well as very good and excellent knowledge regarding Schizophrenia. Whereas 2.22% of caregivers had very good knowledge regarding Schizophrenia. 96.67% of caregivers had excellent knowledge regarding Schizophrenia respectively.

This indicates that knowledge of Schizophrenia among caregivers of patients with Schizophrenia increased after implementing psychoeducation programme on knowledge of Schizophrenia among caregivers of patients with Schizophrenia.

The average knowledge score of caregivers in pre-test was 15.10 which increased to 25.98 in post-test Since there is significant difference is found in the gender as t value is 7.96 and p-value is 0.00 is lesser than 0.05 hence it is significant and also by applying one way ANOVA to associate knowledge with total monthly income of family in which F- value is 2.60 and p-value=0.04 which is less than 0.05 hence significant difference found in total monthly income with knowledge of caregivers. All the p-value were large (greater than 0.05) none of the demographic variables was found to have significant

association with knowledge of Schizophrenia among caregivers of patients with Schizophrenia except gender and total monthly income of family.

## **XI. NURSING IMPLICATION:**

The present study findings have implications for nursing practice, nursing education, nursing administration and nursing research.

### **1. NURSING PRACTICE:**

- Enhance their professional knowledge in practice
- The study can be used as evidenced based practice by various specialties in Nursing during their individual practice in areas.
- Survey can be conducted to identify the risk group within the community.
- Screening camps can be arranged and early detection can be done treat and prevent schizophrenia.
- The psychiatric nurse must have knowledge in teaching schizophrenia and prevention methods in various aspects.
- The psychiatric nurse can teach the other staff nurses and the nursing students regarding schizophrenia.
- Health education programme on schizophrenia can be given in the community as mass health education by using appropriate audio visual aids.
- Self-instructional material regarding teenage pregnancy can be distributed within the organization.

### **2. NURSING EDUCATION:**

- The study can be used in the practical teaching by the Nurse Educators to teach the students about Schizophrenia & its management.
- Conferences, workshops and seminars can be held for nurses to impart update the knowledge and positive attitudes.
- In – service education to update their knowledge and skills in various health care settings should be given. Nursing curriculum has to focus on enabling the nursing students to develop skill in identifying risk groups and prevent the complications.

### **3. NURSING ADMINISTRATION:**

- The present study is proposed to help the administrators to strategically plan and meet the health needs of the schizophrenia patients.
- The administrators in both private and government sectors should take initiative actions to update the knowledge of risk groups on schizophrenia.
- The administrator can encourage the nurses for conducting research in various aspects of schizophrenia.
- The administrator can organize conference, workshop and seminars for nurses working in the psychiatric hospital.
- The administrator should support the staffs to conduct programmes on schizophrenia.

### **4. NURSING RESEARCH:**

- The study will be valuable reference material for further researchers.
- This study is a preliminary set up for exploring the concepts of knowledge of schizophrenia.
- The results of the study encourage the schizophrenia patients to adopt healthy life styles.

## **XII. RECOMMENDATION:**

1. A similar study can be conducted with experimental research design having control group and experimental group.

2. A similar study can be conducted on all caregivers of all mentally ill patients.

3. Similar kind of study can be conducted for a large group to generalize and validate the research findings.

4. The similar study can be conducted as a comparative study between rural hospital and tertiary care hospital of caregivers of patients with Schizophrenia.

5. A study can be replicated in different setting with similar facilities.

## **XIII. LIMITATION:**

1. The study is limited only to the urban area.

2. The study is conducted among small number of population (90) due to shortage of time for data collection.

3. The study is limited to only caregivers of patients with Schizophrenia

4. The study is limited to the caregivers of patients with Schizophrenia who are attending tertiary care hospital of the city.

#### **XIV. CONCLUSION:**

In the assessment of 90 samples, evaluation of knowledge of Schizophrenia among caregivers of patients with Schizophrenia was done before and after the implementing psychoeducation on Schizophrenia among caregivers of patients with Schizophrenia. The level of knowledge was improved in caregivers of patients with Schizophrenia P value < 0.05

Hence the null hypothesis was rejected. all the p-values were large (greater than 0.05), none of the demographic variables was found to have significant association with the pre-existing knowledge among caregivers.

Researcher applied paired t-test for the effectiveness of psychoeducation programme on knowledge of Schizophrenia among caregivers of patients with Schizophrenia. Average knowledge score in pre-test was 15.10 which increased to 25.98 in post-test. T-value for this test was 21.29 with 99 degrees of freedom. Corresponding p-value was small (less than 0.05), the null hypothesis was rejected. This is evident that the knowledge among caregivers was significantly increased after implementation of psychoeducation programme.

Thus, psychoeducation programme is significantly effective in increasing knowledge of Schizophrenia among caregivers of patients with Schizophrenia.

#### **XV. ACKNOWLEDGMENT**

I would like to express my sincere gratitude to my research guide Mr. Divyam Sunil Nikam, Associate Professor, Maharashtra Institute of Mental Health, Pune, India for their unwavering support, guidance, and encouragement throughout my research journey. Their insightful comments, valuable feedback, and expert advice have been instrumental in shaping my research and have helped me to develop my skills as a researcher. Their dedication, enthusiasm, and expertise have been a constant source of inspiration, and I feel fortunate to have had them as my supervisor. I would also like to thank them for their constant availability, patience, and understanding, and for providing a nurturing and supportive environment that has enabled me to grow and excel as a researcher. Thank you for everything.

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