

Coping Strategies among Caregivers of Schizophrenia - A Pilot Analysis

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Caregivers of patients with schizophrenia face stress and emotional hardship and are frequently forced to assume lifelong caregivers role. For many families having a relative with mental illness can be a stressor. (2) To test the feasibility and practicability of the study, a pilot study was conducted among 28 caregivers of schizophrenia. True Experimental Research design was adopted in this study. Conclusion: This pilot study concludes by proving the effectiveness of psychosocial interventions on coping strategies among caregivers of schizophrenia.

Keywords: Coping Strategies; Caregivers; Psychosocial Intervention; Schizophrenia.

Schizophrenia is a severe mental disorder affecting about 1% of the human population with relatively uniform distribution throughout the world. Being chronic and often incapacitating, it extracts tremendous costs from patients, families and society. Caregivers of patients with schizophrenia face stress and emotional hardship and are frequently forced to assume lifelong caregivers role. For many families having a relative with mental illness can be a stressor. Ignorance and misconceptions among the caregivers of patients, deinstitutionalization policy and lack of resources cause serious burden of disease among caregivers. Many families believe that they do not have the necessary coping strategies to help with managing

the mental illness of their relatives. Severe mental illness like schizophrenia have a devastating impact on the patients as well as their family members.²

MATERIALS AND METHOD

To test the feasibility and practicability of the study¹, a pilot study was conducted among 28 caregivers of schizophrenia in the same procedure as that of the original study in Sree Balaji Medical College and Hospital, Chennai. Data was analyzed to find out the suitability of the statistics.

Aim of this study

The aim of the study was to assess the effectiveness of psychosocial interventions

on coping strategies among the caregivers of schizophrenia in Sree Balaji Medical College and Hospital, Chennai

Objectives of the study

- To determine pretest level of coping strategies among caregivers of schizophrenia in experimental and control group.
- To assess and compare posttest level of coping strategies among caregivers of schizophrenia in experimental and control group.
- To evaluate the effectiveness of psychosocial interventions between experimental and control group
- To associate the demographic variables with posttest level of coping score in experimental group

Research methodology

Research approach

A research approach is the umbrella that covers the basic procedure for conducting research. (Treece&Treece, 1986). Selection of the research approach is a basic procedure to conduct a research .In view of the problem selected for the study and objective to be accomplished, the investigator evaluates the effectiveness of psychosocial interventions among the caregivers of schizophrenic patients hence Quantitative evaluative research approach was considered as an appropriate research approach for this study

Research design

True Experimental Research design was adopted in this study.

Variables

Demographic variables of this study include age, religion, gender, level of education, relationship, Perceived income adequacy, employment Status, Duration of caregivers role, Losing Job because Of Care Giving Responsibility, Marital Status, place of Residence and type of family

Sample

Caregivers of schizophrenia who fulfilled the inclusion criteria were selected as samples

Criteria for sample selection

The samples for the study were selected based on the following criteria

Inclusion criteria

- The caregivers of clients diagnosed with schizophrenia caring for 6 months or more.
- The caregivers who were willing to participate in this study.

- The caregivers who speak and understand Tamil or English.
- The caregivers who belong to the age group of 18 -60 years will be included.
- The caregivers who were willing to come for follow up

Exclusion criteria

Caregivers of other psychiatric conditions will be excluded from the study.

The caregivers who are having any hearing difficulty were excluded from the study

Research tool and technique

Part I

It consisted of a structured interview guide with questions related to the demographic data of the caregivers' of schizophrenic patient

Part II

The Family Crisis Oriented Personal Evaluation Scales (F-COPES), developed by Hamilton McCubbin, David Olson, and Andrea Larsen (1981), was created to identify problem solving and behavioral strategies utilized by caregivers in difficult or problematic situations⁽³⁾

Ethical considerations

The proposed study was conducted after the approval of ethical committee of Sree Balaji Medical College and Hospital, Chennai. Permission was obtained from the Head of the Institution. Due consent was obtained from the Dean of Sree Balaji Medical College and Hospital and the head of the Psychiatric department for the pilot study. Informed consent of each subject was obtained before starting the data collection and assurance was given to them that the anonymity of each individual would be maintained.

Table no.2 compares the pre-test level of coping score between Experimental and control group of caregivers

Before psychosocial interventions in experimental group 57.14% of the caregivers are having low level of coping score, 42.86% of them having moderate level of coping score and none of them having high level of coping score. In control group, 64.28% of the caregivers are having low level of coping score, 35.72% of them having moderate level of coping score and none of them having high level of score. Statistically there is no significant difference between experimental and control group.

Table no.3 compares the post-test level

of coping score between Experimental and control group of caregivers

After psychosocial interventions, experimental group, none of the caregivers are having low level of score, 35.71% of them having moderate level of score, and 64.29% of them high level of score.

In control group, 50.00% of the caregivers are having low level of score, 50.00% of them having moderate level of score and none of them having high level of score.

Considering experimental group coping score, in pre-test they are having 63.14score and

in post-test they are having 90.64 score, so the difference is 27.50 this difference is large and it is statistically significant.

Considering control group, in pre-test they are having 62.86 score and in post-test they are having 64.79 score, so the difference is 1.93, this difference is small and it is not statistically significant.

Statistical significance difference between pre-test and post-test was calculated using student paired t-test

Considering pre-test experimental group caregivers are having 63.14 score and in control

Table 1. Demographic Profile

Demographic variables		Group			
		Experimental (n=14)		Control(n=14)	
		n	%	n	%
Age	18-30 years	6	42.86%	5	35.71%
	31-40 years	3	21.43%	5	35.71%
	41-50 years	3	21.43%	2	14.29%
	51-60 years	2	14.29%	2	14.29%
Religion	Hindu	10	71.43%	9	64.29%
	Muslim	2	14.29%	2	14.29%
	Christian	2	14.29%	3	21.43%
Gender	Male	5	35.71%	6	42.86%
	Female	9	64.29%	8	57.14%
Level Of Education	Illiterate	4	28.57%	4	28.57%
	Elementary	3	21.43%	5	35.71%
	Secondary	7	50.00%	5	35.71%
	High school	0	0.00%	0	0.00%
Relationship With The Patient	College	0	0.00%	0	0.00%
	Spouse	7	50.00%	6	42.86%
	Parents	4	28.57%	4	28.57%
	Sibling	2	14.29%	2	14.29%
Perceived income adequacy	Children	1	7.14%	2	14.29%
	Yes	5	35.71%	4	28.57%
	No	9	64.29%	10	71.43%
Employment Status	Employed	6	42.86%	8	57.14%
	Unemployed	8	57.14%	6	42.86%
Duration of caregivers role	1-10 years	9	64.29%	8	57.14%
	>10 years	5	35.71%	6	42.86%
Losing Job because Of Care	Yes	14	100.00%	14	100.00%
Giving Responsibility	No	0	0.00%	0	0.00%
Marital Status	Single	4	28.57%	2	14.29%
	Married	8	57.14%	9	64.29%
	Widowed	2	14.29%	3	21.43%
Residence	Rural	5	35.71%	6	42.86%
	Urban	9	64.29%	8	57.14%
Type of family	Nuclear	5	35.71%	7	50.00%
	Joint	9	64.29%	7	50.00%

group they are having 62.86 score, so the difference is 0.29, this difference is small and it is statistically not significant.

Considering post-test, experimental group caregivers are having 90.64 score and in control group they are having 64.79 score, so the difference is 25.86, this difference is large and it is statistically significant.

Statistical significance difference between pre-test and post-test was calculated using student independent t-test

Table 6 shows the effectiveness of psychosocial interventions on coping gain score.

Experimental group gained 18.33 %score whereas Control group gained only 1.28%score.

Differences and generalization of coping gain score between pre-test and post-test score was calculated using and mean difference with 95% CI and proportion with 95% CI

Validity and Reliability

Content validity was determined by experts from nursing, Medical and psychology.

Table 2. Pretest Level Of Coping Score

Level of coping	Experimental		Control		χ^2
	n	%	n	%	
Low	8	57.14%	9	64.28%	$\chi^2=0.15P=0.69(NS)$
Moderate	6	42.86%	5	35.72%	
High	0	0.00%	0	0.00%	
Total	14	100.00%	1	4	
100.00%					

(Fig 7) $P>0.05$ not significant

Table 3. Post-test level of coping score

Level of coping	Experimental		Control		χ^2
	n	%	n	%	
Low	0	0.00%	7	50.00%	$\chi^2=16.33P=0.001*** (S)$
Moderate	5	35.71%	7	50.00%	
High	9	64.29%	0	0.00%	
Total	14	100.00%	1	4	
100.00%					

Table 4. Comparison of Pretest and Posttest Mean Coping Score

Group		N	Mean	SD	Mean gain score	Paired t-test
Experiment	Pre-test	12	63.14	3.98	27.50	$t=21.80 p=0.001*** (S)$
	Post-test	12	90.64	7.21		
Control	Pre-test	12	62.86	4.69	1.93	$t=1.85 p=0.11 (NS)$
	Post-test	12	64.79	5.03		

Table 5. Comparison Of Mean Copingscore Between Experimental And Control Group

Group		N	Mean	SD	Mean gain score	Student independent t-test
Pretest	Experiment	14	63.14	63.14	0.29	$t=0.17 p=0.86(NS)$
	Control	14	62.86	62.86		
Posttest	Experiment	14	90.64	90.64	25.86	$t=11.01 p=0.001*** (S)$
	Control	14	64.79	64.79		

Reliability of the tool was assessed using Cronbach alpha method. Reliability correlation coefficient value of coping score was 0.82. These correlation coefficients were very high and it is effective tool for assessing effectiveness of psychosocial interventions on and coping strategies among the caregivers of schizophrenia in a selected hospital, Chennai

Major findings of the study
Pretest level of coping score

Before psychosocial interventions in experimental group 57.14% of the caregivers are having low level of coping score, 42.86% of them having moderate level of coping score and none of them having high level of coping score. In control

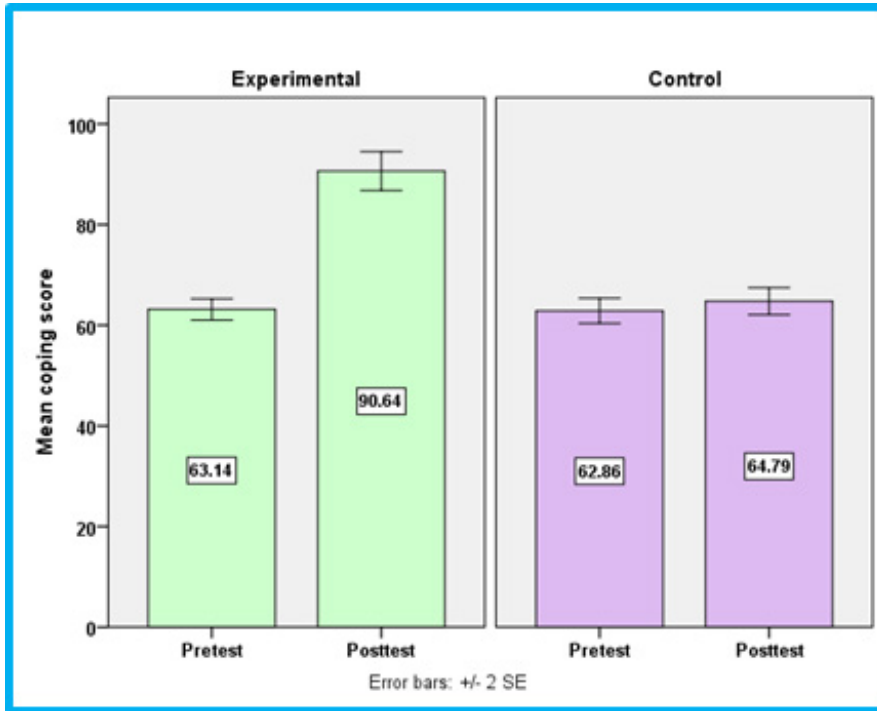


Fig. 1. Simple bar with 2 standard error figure compares the pre-test and post-test coping score among Experiment and Control group

AGE DISTRIBUTION

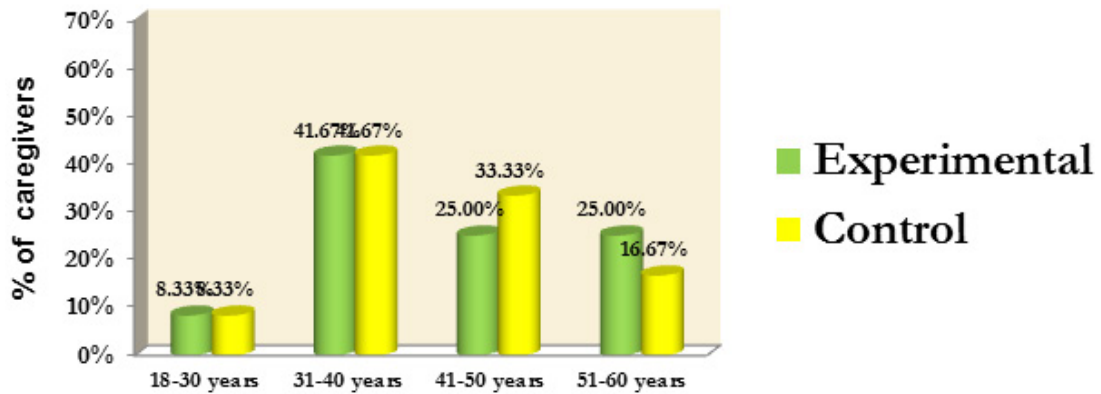


Fig. 2. Demographic Profile (Age Distribution)

group, 64.28% of the caregivers are having low level of coping score, 35.72% of them having moderate level of coping score and none of them having high level of score. Statistically there is no

significant difference between experimental and control group.

Post-test Level of Coping Score

After psychosocial interventions, in

Table 6. Effectiveness of psychosocial interventions on coping gain score

Group	Test	Maximum score	Mean score	Mean Difference of coping gain score with 95% Confidence interval	Percentage Difference of coping gain score with 95% Confidence interval
Experimental	Pre-test	150	63.14	27.50 (24.77 – 30.23)	18.33 % (16.51% –20.15%)
	Post test	150	90.64		
Control	Pre-test	150	62.86	1.93 (-0.32 – 4.18)	1.28% (-0.21% –2.77%)
	Post test	150	64.79		

DURATION OF CAREGIVERS ROLE

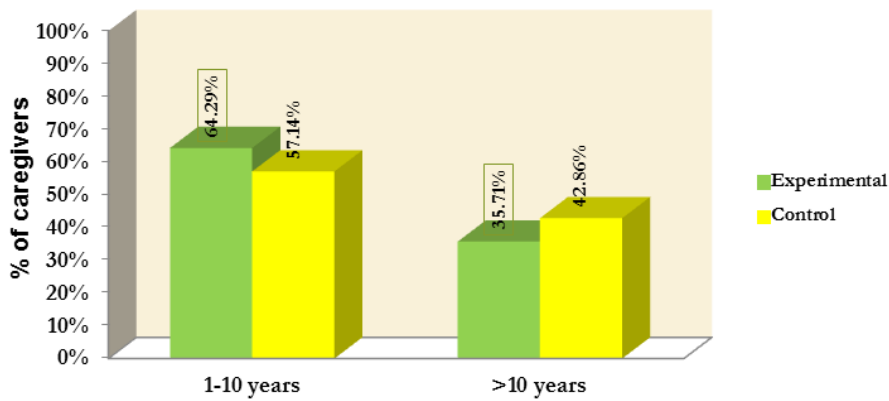


Fig. 3. Demographic profile (Duration of Caregiver)

PRETEST LEVEL OF COPING SCORE

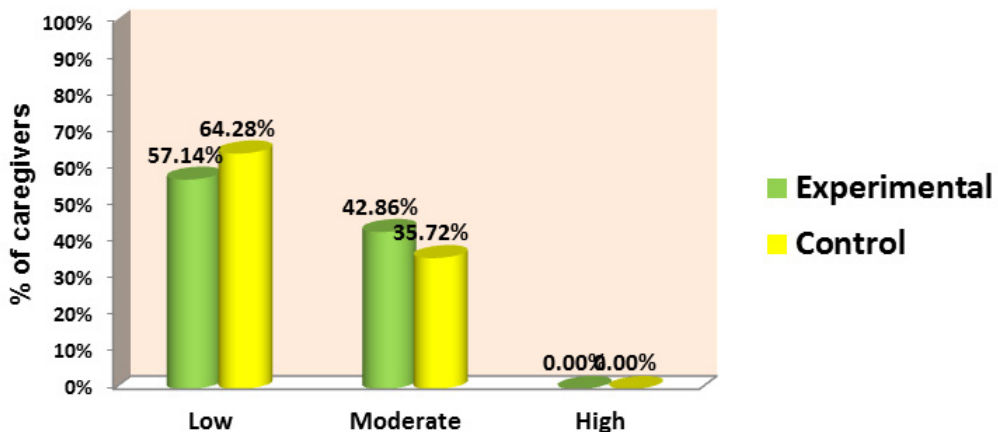


Fig. 4. Shows the pretest level of coping score in experimental and control group

Table 7. Association Between Posttest Level Of Coping Score And Caregivers Demographic Variables (Experimental group)

Demographic variables	Post-test Level of coping score				Chi-square value
	Moderate n	Moderate %	High n	High %	
Age	2	22.22%	7	77.78%	$\chi^2=1.99p=0.16(NS)$
	3	60.00%	2	40.00%	
Religion	4	40.00%	6	60.00%	$\chi^2=0.28p=0.60(NS)$
	1	25.00%	3	75.00%	
Gender	1	20.00%	4	80.00%	$\chi^2=0.11p=0.73(NS)$
	4	44.44%	5	55.56%	
Level Of Education	4	100.00%	0	0.00%	$\chi^2=6.54p=0.01**(S)$
	1	10.00%	9	90.00%	
Relationship With The Patient	4	57.14%	3	42.86%	$\chi^2=1.24p=0.26(NS)$
	1	14.29%	6	85.71%	
Perceived income adequacy	1	20.00%	4	80.00%	$\chi^2=0.11p=0.74(NS)$
	4	44.44%	5	55.56%	
Employment Status	1	16.67%	5	83.33%	$\chi^2=0.52p=0.47(NS)$
	4	50.00%	4	50.00%	
Duration of caregivers role	1	11.11%	8	88.89%	$\chi^2=3.98p=0.05*(S)$
	4	80.00%	1	20.00%	
Losing Job because Of Care Giving Responsibility	5	35.71%	9	64.29%	$\chi^2=0.00p=1.00(NS)$
	0	0.00%	0	0.00%	
Marital Status	2	25.00%	6	75.00%	$\chi^2=0.16p=0.68(NS)$
	3	50.00%	3	50.00%	
Residence	2	40.00%	3	60.00%	$\chi^2=0.11p=0.73(NS)$
	3	33.33%	6	66.67%	
Type of family	1	20.00%	4	80.00%	$\chi^2=0.83p=0.36(NS)$
	4	44.44%	5	55.56%	

experimental group, none of the caregivers are having low level of score, 35.71% of them having moderate level of score, and 64.29% of them having high level of score. In control group, 50 % of the caregivers were having low level of score, 50.00% of them having moderate level of score and none of them having high level of score.

Comparison Of Pretest and Posttest Mean Coping Score

Considering experimental group coping score, in pre-test they are having 63.14score and in post-test they are having 90.64 score, so the difference is 27.50 this difference is large and it is statistically significant. Considering control group, in pre-test they are having 62.86 score and

in post-test they are having 64.79 score, so the difference is 1.93, this difference is small and it is not statistically significant.

Comparison of mean coping score between experimental and control group

Considering pre-test experimental group caregivers are having 63.14 score and in control group they are having 62.86 score, so the difference is 0.29, this difference is small and it is statistically not significant. Considering post-test, experimental group caregivers are having 90.64score and in control group they are having 64.79 score, so the difference is 25.86, this difference is large and it is statistically significant.

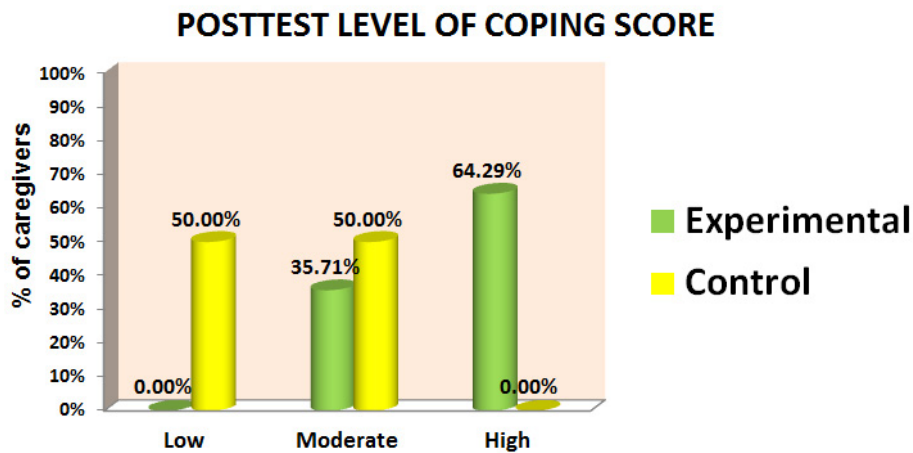


Fig. 5. Shows the posttest level of coping score in experimental and control group

ASSOCIATION BETWEEN POSTTEST LEVEL OF COPING SCORE AND DURATION OF CAREGIVERS ROLE AMONG CAREGIVERS(Experimental Group)

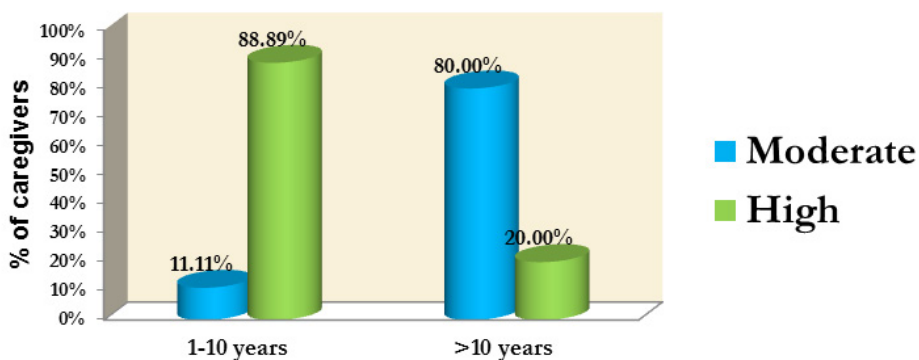


Fig. 6. Association between posttest level of coping score and duration of caregivers role among caregivers

Effectiveness of psychosocial interventions on coping gain score

Experimental group gained 18.33 %score whereas Control group gained only 1.28%score.

Association Between Posttest Level Of Coping Score And Caregivers Demographic Variables (Experimental Group)

The level of coping gain score has improved by 88, 89% among caregivers of schizophrenia with a duration of 1-10 years where as in group of caregivers above 10 years of duration by 20%.

Conclusion

Before psychosocial interventions in experimental group 57.14% of the caregivers were having low level of coping score, 42.86% of them having moderate level of coping score and none of them having high level of coping score. In control group, 64.28% of the caregivers were having low level of coping score, 35.72% of them having moderate level of coping score and none of them having high level of score. After psychosocial interventions, in experimental group, none of the caregivers are having low level of score, 35.71% of them having moderate level of score, and 64.29% of them high level of score. In control group, 50 % of the caregivers were having low level of score, 50.00% of them having moderate level of score and none of them having high level of score. *Considering experimental group* coping score, in pre-test they were having 63.14score and in post-test they are having 90.64 score, so the difference is 27.50 this difference is large and it is statistically significant. *Considering control group*, in pre-test they are having 62.86 score and in post-test they are having 64.79 score, so the difference is 1.93, this difference is small and it is not statistically significant. Statistical significance difference between pre-test and post-test was calculated using student paired t-test. Effectiveness of psychosocial interventions on coping gain score was proved with the result of coping gain score in Experimental group as 18.33 %score whereas in Control group only 1.28%score. This pilot study concludes by proving the effectiveness of psychosocial interventions on coping strategies among caregivers of schizophrenia

Conflict of interest

No conflict of interest.

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