

Pre experimental study to assess the effectiveness of structured teaching program on knowledge regarding management of violent behaviour among primary care givers of mentally ill in tertiary care hospital in Coimbatore India

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ABSTRACT

Introduction: In India, the family is the main support system for people with mental illnesses. It has been observed that >90% of patients with chronic mental illness live with their families and continue to take care of basic necessities [1-3]. Most often, the patients who have mental illness are brought for psychiatric help by the family. The family members take care of their medications, earn a living for them, stay with them, and most importantly, offer them emotional and psychological support. This also has a significant role in the rehabilitation of the patient and in bringing him or her to the mainstream. This family support system, which is unique to India, is supposed to be one of the good prognostic indicators for mental illness [4]. Family means to feel secure and to be loved and cared for. Conventionally, joint family setups in India have taken care of the older adults and sick people with utmost attention. Thus, the family has always taken the major share in responsibilities of mental health care compared to the government.

Aim: The aim of this study is to evaluate the effectiveness of structured teaching program on management of violent behaviour among primary care givers of mentally ill.

Methodology: The pre experimental study was undertaken on management of violent behaviour among primary caregivers of mentally ill clients. Convenient sampling technique was used. The data was collected through structured questionnaire. Descriptive and inferential statistics were used to analyze the data.

Results: Majority of the 17 primary care givers (85%) had adequate knowledge and 3 primary care givers (15%) had moderately adequate knowledge regarding the management of mentally ill.

Conclusion: The results showed high significant level with mean difference score of 23.55 and the 't' value was 2.81 ($p < 0.05$). Hence, null hypothesis is rejected and H_1 research hypothesis is accepted. The study found that structured teaching program helped the primary care givers in caring with the mental ill.

Keywords: Effectiveness, Violent Behaviour, Mentally ill, Primary Care Givers, Structured Teaching Program

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INTRODUCTION

The family in India is the primary support mechanism for mentally ill individuals. It was noted that > 90% of chronic mental ill patients live with their families and continue to take care of fundamental necessities. A global program of deinstitutionalization and gradual transfer of inpatient care to community settings has meant that caregivers are taking on increasing levels of care giving duties and are

widely recognized for their input to patient care and recovery [4]. The intrinsic factors are a combination of personality characteristics, current intense mental distress and problems in dealing with anger. The extrinsic factors are more varied including the physical and social settings where violence and aggressive characteristics of the victims the experience and training of health and social professionals and the perceived risk of danger to others. Understanding how such variable contextual factors interacts with historical behaviour in the aetiology of violence and aggression is important in informing evidence based approaches to the prevention of violence and aggression that would otherwise emerge and aggression that has already occurred or is still in progress [5]. This approach is anomalous because the impact of violence and aggression in mental health, health and community setting is significant and diverse, adversely affecting the health and safety of service users, care givers and staff [6]. Critically, the management of violence and aggression may itself be hazardous to those exhibiting violent or aggressive behaviour and accentuate risks to their health and safety [7].

Statement of the Problem

Pre experimental study to assess the effectiveness of structured teaching program on knowledge regarding management of violent behaviour among primary care givers of mentally ill in tertiary care hospital in Coimbatore India.

OBJECTIVES

1. To assess the management of violent behaviour among primary caregivers of mentally ill.
2. To evaluate the effectiveness of structured teaching program on management of violent behaviour among primary caregivers of mentally ill.
3. To associate the management of violent behaviour among primary caregivers of mentally ill with selected demographic variables.

Assumptions

1. Primary caregivers may not have adequate knowledge on management of violent behaviour of mentally ill.
2. Administration of structured teaching program may enhance management of violent behaviour among primary caregivers of mentally ill.

Research Hypotheses

- H₁:** There will be a significant difference in the pre and post test of management of violent behaviour among primary caregivers of mentally ill.
- H₂:** There will be a significant association of the post test of management of violent behaviour with selected demographic variables among primary caregivers of mentally ill.

Research Variables

Independent Variable: Structured teaching program on management of violent behaviour.

Dependant Variable: Knowledge on management of violent behaviour among primary caregivers of mentally ill.

Research approach and design: Pre experimental research design.

Setting of the study

The study was conducted in PSG Hospital. PSG Hospital is a tertiary care hospital which has bed strength of 1400 and 19 specialty OPDs. This study was conducted among 20 participants who were admitted in psychiatric ward at selected PSG Hospital at Coimbatore.

Population and Sampling

The population of the study consists of primary caregivers of patients on mentally ill. The sample consists of primary caregivers of patient who stay with the patient during hospitalization. The total number of patients with mentally ill from January 2018 to December 2018 was used as the baseline data to determine the sample size. Total of 1274 patients were with the diagnosis of affective disorders.

Sample size: Sample size has been calculated by using allowable error method and 20 samples of patient's primary caregiver were selected.

$$n = \frac{4pq}{L^2}$$

$P = \text{mean}/\text{total population in a year} \times 100$

$\text{Mean} = 1274/12 = 106$

$P = (106/1274 \times 100) = 8.32$

$q = 100 - p$

$q = 100 - 8.32 = 91.66$

$L = \text{allowable error} = 13$

$$n = \frac{4 \times 8.32 \times 91.66}{13^2}$$

$= 18.05$

Estimated sample size is 20

Sampling technique: Convenient sampling technique was used in this study. Sample size of the study was 20 primary caregivers of mentally ill [8,9].

Sample Selection Criteria

Inclusive Criteria:

- Primary care givers who could read and understand English/Tamil.
- Primary care givers who were willing to participate.

Exclusive Criteria:

- Primary caregivers such as health professionals and home nurses.
- Primary care givers who are below the age of 15 years.

Technique of data collection if interval, give detailed description of intervention performed

The tool constructed in this study consists of 3 parts.

Section A: Demographic profile of the primary caregivers:

Includes age, relationship with the patient, educational status, occupational status, family income and previous information regarding violent behaviour.

Section B: Demographic profile of mentally ill:

Age, diagnosis, duration of illness, duration of violent behaviour and previous information regarding violent behaviour.

Section C: The Management of Aggression Violence Attitude Scale (MAVAS) was modified as knowledge questionnaire with the expert content validity. It is self administered and consists of 27 questions. Thirteen were related to the causes of aggression, violence and reflected the internal, external, and situational/interactional models of violent behaviour. And 14 items represented different approaches to the management of aggression.

Reliability of Scale for the Management of Aggressive and Violent Behaviour (C_MAVAS): Psychometric properties testing in mental health nurses were assessed in China among mental health nurses. A convenient sample of 262 qualified mental health nurses working in a local psychiatric hospital was recruited. The result showed that the content validity of the C_MAVAS was very satisfactory with validity indices of 97.4% for the overall scale and 90% to 100% for individual items. Exploratory factor analysis yielded a four-factor solution: ‘interactional perspectives on patient violence’, ‘best ways perceived for violence management’, ‘internal or biomedical perspectives on patient violence’, and ‘external perspectives on patient aggression and violence’, were important in shaping their attitudes towards managing violence and patient disruptiveness. Internal consistency of the Chinese version was barely satisfactory (Cronbach’s alpha=0.51-0.67) for the four factors/subscales and its test-retest reliability was good (Pearson’s coefficient=0.84). The findings suggests the C_MAVAS is a valid and reliable tool to measure mental health nurses’ attitudes towards patient violence/aggression in a mental hospital setting [8,9].

Scoring	
Level of Knowledge	Percentage
Inadequate knowledge	< 50%
Moderately adequate knowledge	51-75%
Adequate knowledge	>75%

INTERVENTION

Structured teaching program on management of violent behaviour in the aspect of definition, causes, symptoms and management of violent behaviour. It includes communication strategies, environmental strategies, behavioural strategies, therapeutic strategies, and ways to protect you and stress management.

Ethical issues: The project was approved by the Intuitional human ethics committee (IHEC), PSG Institute of Medical Science and Research. Detailed information on the research project was communicated to caregivers, including procedures for protecting interviewees' and patients' privacy; arrangements for secure access to and storage of data; confidentiality arrangements for the one-on-one interviews in a private room; and the non-recording of patients' names.

Plans for data analysis: The data analysis plan includes descriptive and inferential statistics.

Descriptive Statistics

- Percentage and frequency to analyze demographic variables.
- Mean and standard deviation to analyze the pre and post test scores of management of violent behaviour among primary caregivers.

Inferential Statistics

Paired “t” test was used to compare the pre and post test scores of management of violent behaviour among primary caregivers of mentally ill.

- Chi-Square test was used to find out the association between demographic data and management of violent behaviour among primary caregivers.

Table 1: Assessment of post test level of management of violent behaviour among primary care givers (n=20).

S. No	Knowledge level	Category	Frequency	Percentage
1.	Inadequate knowledge	< 50%	3	15
2.	Moderately adequate knowledge	51-75	16	80
3.	Adequate knowledge	>75%	1	5

Table 2: Frequency and percentage distribution of post test of violent behaviour among primary care givers (n=20).

S. No	Knowledge level	Category	Frequency	Percentage
1.	Inadequate knowledge	<50%	-	-
2.	Moderately adequate knowledge	51-75%	3	15
3.	Adequate knowledge	>75%	17	85

Table 3: Comparison of pre test and post test violent behaviour among primary care givers (n=20).

S. No	Characteristic	Pre test		Post test		Mean Difference	t-value
		Mean	S.D	Mean	S.D		
1.	Primary care givers knowledge assessment	57.25	7.785	80.8	19.3	23.55	t=2.81 S*

DISCUSSION

In the present study the demographic variables of patient shows the 7 samples (35%) were at the age group 21-30 years, 12 samples (60%) were male, and 18 samples (90%) were Hindu, 14 samples (70%) were 1-3 years of duration of illness, 15 samples (75%) were married patients. 12 samples (60%) were nuclear family, 14 samples (70%) were urban people.

A similar study was conducted in violence behaviour in adolescents and the results shows that the mean frequency 60.2% and fighting injury and (non injured: 84.5%) and the bullying frequency varied widely cross sectional from 57.0% for fighting was most highly associated with smoking, drinking, feeling irritable or bad tempered and having been bullied [10].

In the present study the effectiveness of structured teaching program on violent behaviour among primary care givers were showed the mean value of pre test was 57.25 and was increased in post test to 80.8. The difference between the pre test and post test mean was 23.6. The 't' value was 3.84, which had

high statistical significance at $p < 0.05$ level and which confirms that there was a statistically significant difference between pre test and post test knowledge of primary care givers in the management of mentally ill patients.

The present study results were consistent with the findings of the following studies carried out on caregiver reports of patient-initiated violence in psychosis. Patient violence was unrelated to caregiver burden or caregiver distress ($P > 0.05$). Self-esteem was significantly lower in caregivers reporting patient violence ($t = 2.199$, $df = 60$, $P = 0.03$, mean difference = -3.10 [95% CI -5.92 to -0.281]), while levels of functional coping through emotional support were significantly higher ($t = 2.902$, $df = 61$, $P = 0.005$, mean difference = -0.56 [95% CI = -0.956 to -0.176]) [11].

In the present study the association between selected demographic variables and effectiveness of structured teaching program on violent behaviour among primary care givers showed that there is significant association with the effectiveness of structured teaching program and religion $\chi^2 = 3.95$, marital status $\chi^2 = 3.95$ and the occupational status $\chi^2 = 3.95$. It was inferred that religion, marital status and occupational status had association with the effectiveness of structured teaching program on violent behaviour among primary care givers mentally ill.

A similar study was conducted on caregiver reports of patient-initiated violence in psychosis. The association of the study showed that regarding gender ($\chi^2 = 8.23$, $df = 1$, $P = 0.004$), with a history of voluntary admissions ($\chi^2 = 17.2$, $df = 1$, $P < 0.01$). Fewer had a history of violence ($\chi^2 = 11.3$, $df = 1$, $P = 0.001$) or sexual offences ($\chi^2 = 7.43$, $df = 1$, $P = 0.006$) [12-14].

CONCLUSION

The study was conducted to assess the effectiveness of structured teaching program on management of violent behaviour among primary care givers of individual with mental health problem. A questionnaire based on violent behaviour among primary care givers. In the overall majority of pre test of 16 primary care givers (80%) had moderately adequate knowledge, 3 primary care givers (15%) had inadequate knowledge and 1 primary care giver (5%) had adequate knowledge. In the with respect to majority of post test of 3 primary care givers (15%) had moderately adequate knowledge and 17 primary care givers (85%) had adequate knowledge. The mean difference score was 23.55 and the 't' value was 2.81 which had high statistical significance at $p < 0.05$ level. Hence the null hypothesis is rejected and H_1 the research hypothesis is accepted. The study found that education had helped to develop knowledge and increase ability of the primary care givers in caring for patient who are on mentally ill.

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