# Effectiveness of Aggression Management Training Programme for Staff Nurses and Ward Attendants Working in a Selected Psychiatric Hospital

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#### **Abstract**

**Introduction:** Management of violence and aggressive remains a challenge to mental health care providers. Thousands of people whose aggression is due to serious mental illness are secluded or restrained every day. Agitation among psychiatric inpatients (particularly those diagnosed with schizophrenia or bipolar disorder) is common, and unless recognized early and managed effectively, can rapidly escalate to potentially dangerous behaviors, including physical violence. Aims & objective: The objective of this study was to find whether an aggression management training programme for mental health care providers would be effective in improving their knowledge and practice regarding aggression management of patient with psychiatric disorder. **Methods & Materials:** A convenient sample of 30 mental health care providers including 12 staff nurses and 18 ward attendants involved in direct patient care were included in the study. One group pre-test post-test study design was adopted to find the effectiveness of the training programme. One day training programme was organized which included lecture, discussion and demonstration regarding aggression management of mentally ill patients who were hospitalized. Knowledge questionnaire was developed by the investigators which was used to assess the knowledge of participants regarding aggression management before and after the training

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programme. The questionnaire includes 20 items, and the maximum and minimum possible scores was 20 and 0 respectively. **Results:** Majority (67%) of the participants were male (n=20). The mean pretest knowledge score regarding aggression management was  $7.97 \pm 2.8$  and the post-test score was  $11.63\pm 1.9$ . There was significant improvement in the knowledge score regarding aggression management from before and after the training programme (<0.001; paired sample 't' test). The result suggests the need for aggression management training programmes for mental health care providers that can lead effective management of aggression in psychiatric hospitals.

**Keywords:** Aggression management; Aggression management training.

#### Introduction

Aggression is a complex human behaviour that has evolved to enhance the individual's and group's safety and survival. Aggressive behaviour is caused by a multitude of factors and in today's civilized society, aggression is often regarded as unacceptable behaviour.

Management of violence and aggression remains a challenge to mental health care providers. Thousands of people whose aggression is due to serious mental illness are secluded or restrained every day. Agitation among psychiatric inpatients (particularly those diagnosed with schizophrenia or bipolar disorder) is common and unless recognized early and managed effectively, can rapidly

escalate to potentially dangerous behaviors, including physical violence.

Aggression is a significant clinical problem in psychiatric facilities. It can be unprovoked or on provocation. One study of a closed psychiatric ward with 20 patients faced nearly one aggressive incident a day. In psychiatric units there has always been a need to consider and manage violence from patients directed towards others. To prevent harm to others, coercive measures such as restraint or seclusion are sometimes taken which patients often describe as a traumatic experience.[1,2]

# Need for the Study

During the last decade, research on violence has increased and knowledge about different aspects of violence by patients in a psychiatric unit has grown. Around 20-45% of hospitalized patients with psychiatric disorders show violent behaviour. The incidence of violence of patients with schizophrenia is estimated to be around 2-45%.[3,4] In psychiatric settings, 86% of aggressive incidents were preceded by some form of aversive stimulation by the staff or caregiver to the patient.[5] This finding suggests that environmental and interpersonal variables contribute to aggression, in addition to psychopathological and biological factors.

Model of aggression was proposed and it emphasized that repeated inpatient aggression may be the result of a vicious circle, whereby a patient's violent behavior was often followed by an increase in stress on the patient caused by environmental or communication factors, heightening the risk of another outburst of violence.[6] Needham I et al conducted a dual centre prospective study on two Swiss psychiatric admission wards to test the effectiveness of a systematic aggression risk assessment, in combination standardized training course in aggression management and found a significant drop in coercive measures.[7] The study concluded that a systematic risk assessment and a training course may assist in reducing the incidence rate of coercive measures on psychiatric acute admission wards and recommended further

testing of the intervention.

Livingston JD et al conducted a narrative review of literature published between 1990 and 2007 to evaluate the effectiveness of staff training programs designed to prevent and manage violence and aggression in psychiatric hospitals, and found that aggression management training has been effective in some areas, such as reducing the use of restraints and other coercive control devices.[8] The investigators went on to state that more methodologically rigorous research is needed to firmly establish whether aggression management training programme is effective in reducing aggression and staff injuries. Allen D and Tynan H evaluated the impact of a training program which was designed to help staff members prevent and effectively manage aggressive behavior.[9] This study was done on 109 staff members who worked in services for persons with developmental disabilities. Instruction in distraction and defusion strategies was provided to the participants and training significantly improved participants' knowledge of reactive behavior management and their confidence to work with aggressive individuals.

Whittington and Wykes T found that problematic communication between staff members and patients might contribute to aggression. Patients might become frustrated and angry if they perceived that staff members were not accessible or if they encountered obstacles to obtaining information.[5] Needham *et al* found that a systematic risk assessment and a training course in aggressive management assisted in reducing the incidence rate of coercive measures on psychiatric acute admission wards.[7]

Violence in health care has been widely reported, and health care workers, particularly nurses in acute care settings, are ill-equipped to manage patients who exhibit aggressive traits. Aggressive patients can harm self, staff (staff nurses and ward attendants), other patients and care givers if not effectively managed. So all care givers need to be trained to manage aggressive behavior of mentally ill patients. It is important for the care givers to

notice early signs of aggression to manage aggressive behavior without harming patient, self, as well as others. Hence this study was planned to evaluate the effectiveness of an aggression management training programme on knowledge of staff nurses and ward attendants of a selected psychiatric hospital regarding aggression management of mentally ill patients.

#### Methods and Materials

The study was conducted in January, 2013 in a selected psychiatric hospital in Uttar Pradesh. 30 participants which comprised of 12 staff nurses and 18 ward attendants who were involved in direct patient care were included in the study through convenient sampling. One group pretest posttest design was adopted for the study.

Knowledge questionnaire to assess the knowledge regarding aggression management of mentally ill patients was developed by the investigators and was translated to Hindi. The tool was validated by the experts in the field of psychiatry and psychiatric nursing. The reliability (r=0.8) of tool was established using split half method. All the participants were assessed with knowledge questionnaire before and immediately after the training program. The one day training programme covered the

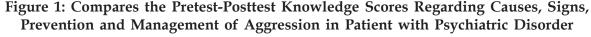
topics such as incidence and causes of aggressive behavior, prevention and management of aggressive behavior, demonstration of self protection techniques and physical restraining.

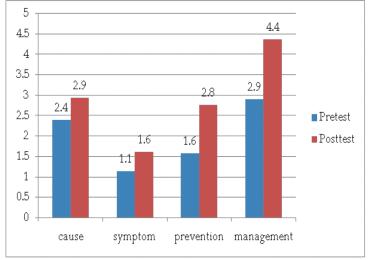
# Data Analysis

The knowledge questionnaire comprised of 19 multiple choice questions to assess the knowledge regarding aggression management. Each of the correct responses were scored one point and wrong responses were marked zero. Knowledge was assessed in four areas of aggression management; causes, symptoms, prevention and management. The knowledge questionnaire had four questions each to assess causes, symptoms and prevention and seven questions to assess management. The maximum and minimum possible overall knowledge score was 19 and 0 respectively. Paired 't' test was applied to find out the improvement in the mean score from pretest to post-test assessment.

#### Results

Thirty participants including 12 Staff Nurses and 18 ward attendants participated in the study. Majority (67%) of the participants were





Disorder					
Knowledge score	Pretest	Posttest	Mean difference	't' value	p value
	(Mean±SD)	(Mean±SD)	(Mean±SD)		
Overall	7.97	11.63	3.67	9.12	< 0.001
Causes	2.4	2.9	0.53	2.80	< 0.001
Signs	1.1	1.6	0.46	3.29	< 0.001
Prevention	1.6	2.8	1.20	5.07	< 0.001
Management	29	4 4	1 40	7 97	<0.001

Table 1: Mean Difference between Pretest and Posttest Knowledge Scores Regarding Causes, Signs, Prevention and Management of Aggression in Patient with Psychiatric Disorder

male (n=20). The mean overall pretest knowledge score regarding aggression management was  $7.97 \pm 2.8$  and the post-test score was  $11.63\pm1.9$ . There was significant improvement in the knowledge score regarding aggression management from before and after the training programme (<0.001; paired sample 't' test).

As shown in Table 1, there was significant improvement of knowledge scores from pretest to postest regarding management of aggression in all the areas such as causes, signs and symptoms, prevention, and management (p<0.001). Hence, it can be interpreted that the improvement in the knowledge score is due the effect of training programme.

#### Discussion

The findings demonstrated that the training programme of aggression management was effective for staff nurses and ward attendants. The knowledge regarding aggression and its management was improved. Literature suggests that the training of healthcare providers of psychiatric hospitals is instrumental in prevention and effective management of patients with aggression.[10] It is important for care givers to notice the early signs indicating that a patient is becoming agitated and to manage that condition without harming patient, self, as well as others.

The outcome of the study suggests the need for aggression management training programmes for mental health care providers which may result in effective management of aggression in psychiatric hospitals. The findings of this and other studies highlight the need for more rigorous approaches to evaluating the effectiveness of aggression management training and undertaking patient aggression management research more rigorously.

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