*Original Article*

# Effectiveness of Self Instructional Model on the Management of Violent Patients among Nursing Personnel in Selected Ward of Lumbini Medical College

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**ABSTRACT:**

**Introduction**: Mental health nursing is the practice of promoting mental and caring for people with mental illness. Violence towards nurses by the psychiatry patient in clinical setting is an endemic worldwide and a multifaceted problem. **Method**: Purposive sampling of thirty sample of nurses from psychiatry ward, emergency room and medicine ward were selected from 1st of August 2013 to 30th of August, 2013. Sampling Technique was pre-experimental, one group pre-test, post-test design, Reliability of the tool (r=0.95) was tested by split half method using Karl Pearson's Product Moment Correlation formula and Spearman-Brown's Prophecy formula. Socio-demographic data by using proforma. Pretest was done, knowledge score was calculated, self-developed instructional model was introduced and after 7 days' duration post-test was done. **Results**: Pre-test assessment revealed that the highest percentage (53.34) of the nursing personnel had good level of knowledge. The significance of difference between the pre-test and post-test knowledge scores was statistically tested using paired 't' test and was found to be very highly significant (t=11.66, P < 0.05). **Interpretation**: The study revealed that there was very highly significant increase in the knowledge following the administration of self-instructional module.

**Key word**: Violent patients, Nursing personnel, Self-Instructional Module

## INTRODUCTION

Mental health nursing is the practice of promoting mental health as well as caring for people who have mental illness.[1] During the course of practice, a mental health nurse has to face violence from acute psychiatric patients. Violence towards nurses in workplace is an endemic worldwide and detrimental effect on nurse's psychological, cognitive, and emotional wellbeing, and negative impact on public healthcare costs and organizations effectiveness.[2] Usual assaultive event are two assaults per ward; out of these one resulted in major physical injury even sexual harassment and sexual assaults.[3] Emergency departments and psychiatric departments are always susceptible to violent incidents.[4]

To overcome the above problems a mental health nurse must possess sound knowledge and skills in management of violent psychiatric patients.[5]

According to the National Patient Safety Agency Survey it was estimated that in England and Wales there were 3,00,000 aggression/minor assaults, 50,000 absconding, 45,000 sexual assault/harassment, 25,000 self-harm, 4,500 physical threat, 200 deaths by suicide, 85 unnatural deaths of detained patients and 1.3 homicides by inpatients per year.[6] Even in the Royal College of Psychiatrists, London (2004), out of the 1515 reported violent incidents, 766 were found to be major assaults.[7]
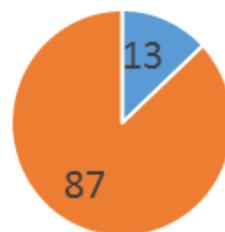
## OBJECTIVES

To differentiate between score of pre-test knowledge and post-test knowledge using the same structured questionnaire.

## HYPOTHESIS

The mean post-test knowledge score of nursing personnel on management of violent patients will be significantly higher than their mean pre-test knowledge score.

## RESULTS

The fig-1 shows that majority 87% of the nursing staff had not attended any in-service education. Table-1 shows that only 13.33% of the subjects possessed excellent knowledge, 53.34% of the subjects had good knowledge, 23.33% had satisfactory and 10% had poor knowledge.



*Fig 1: Nursing staffs attending inservice education*

| Percentage of score | Level of Knowledge | Fre-quency | Percent-age |
|---|---|---|---|
| >70 | Excellent | 4 | 13.33 |
| 60-70 | Good | 16 | 53.33 |
| 50-60 | Satisfactory | 7 | 23.33 |
| <50 | Poor | 3 | 10 |

**Table 1**: Distribution of the level of knowledge on pre-test of Nursing personnel (N=30)

Table-2 shows that the highest effectiveness was found for the "Violence is associated with substance abuse" (54%) whereas least effectiveness (7%) was found for the items "Violence means risk of injury to self and others" and "Severe depression with psychotic symptoms causes violence to self.

| S N | Item | Pre-test | | Post-test | | Effec-tiveness | |
|---|---|---|---|---|---|---|---|
| | | No | % | No | % | No | % |
| 1 | Violence means risk of injury to self and others | 28 | 93 | 30 | 100 | 2 | 7 |
| 2 | Violence is characterized by physical and verbal threat | 11 | 37 | 21 | 70 | 11 | 33 |
| 3 | Phychological factors responsible for violence are life experience | 2 | 7 | 8 | 27 | 6 | 20 |
| 4 | Violence is associated with substance abuse | 2 | 7 | 8 | 27 | 6 | 20 |
| 5 | Violent behavior is commonly seen in psychiatric hospitals in patients with psychosis | 10 | 33 | 26 | 87 | 16 | 54 |
| 6 | Factors which influence aggravation of violence in psychiatric ward is not caring or showing concern towards patient | 27 | 90 | 30 | 100 | 3 | 10 |
| 7 | Severe depression with psychotic symptoms causes violence to self | 13 | 45 | 21 | 70 | 8 | 25 |
| 8 | An initial symptom which should alert the nurse regarding violence is lun and aggressive speech | 25 | 83 | 27 | 90 | 2 | 7 |
| 9 | Assessment of motor activity of violent behavior includes clenching and pounding fist | 19 | 63 | 27 | 90 | 8 | 27 |
| 10 | Assessment of verbal behavior of violent patients includes verbal threats towards real and imagined objects | 13 | 43 | 24 | 80 | 11 | 37 |

Table 2: Effectiveness of Self Instructional Module in pre-test and post-test with regard to concept of violence, factors causing violence, identification of violence and initial management of violence (N=30)

## TESTING OF HYPOTHESIS

The hypothesis was tested using "paired-t" test. The value of 't' was calculated to analyses the difference in the knowledge of the nursing personnel before and after the administration of self-instructional module.

The calculated "t" value was greater than the table value in all sections. Therefore, the null hypothesis was rejected and the research hypothesis was accepted. The gain in knowledge score was observed to be highly significant (Table-3).

Table-4 shows that total mean was increased by 7.16 and 23.87% after administration of the self-instructional module.

| Areas | Mean effec-tiveness | 't' value | Table value | P value |
|---|---|---|---|---|
| Concept of violence, factors causing violence, iden-tification and ititial man-agement | 2.56 | 8.25 | 1.70 | <0.05 |

Table 3: Significance of difference between pre-test and post-test knowledge (N=30)

## DISCUSSION

The highest percentage (80%) of the sample belonged to the age group of 21-30 years, highest percentage of nurses (90%) were staff Nurse, and remaining were Nursing Officers. The majority (87%) of the nursing personnel did not receive any additional education, only 13% had received some education program this findings is supported by a findings of Lin Y, Liu H.9 The results showed that 44.7% nurses had received training regarding violence; 61% of the nurses reported experiencing verbal and physical threat without formal training.[8] The pre-test scores showed that highest percentage (87%) of the nursing personnel had average knowledge regarding management of violent patients, 10% had good knowledge and only 3% of had poor knowledge. This finding is similar to the findings of Park De C in which the knowledge score of nursing staff was highest (98%) i.e. good knowledge and only 2% had poor knowledge.[9] The mean percentage of the total knowledge score of the pre-test was 68.9% with total mean ± SD of 20.67±4.04. In the area of "concept of violence, factors affecting violence, identification and initial management of violent patients", the pretest

| Area | Max score | Pre-test(X) mean ±SD | Mean % | Post-test(Y) Mean ±SD | Mean% | Effectiveness (Y-X) | % |
|---|---|---|---|---|---|---|---|
| Concept of violence, causative factors, identification and initial management | 10 | 5.75 ±1.51 | 18.57 | 8.13 ±0.88 | 27.10 | 2.56 ± 0.63 | 8.53 |

**Table 4**: Effectiveness of self-instructional module with mean, SD and mean percentage of pre-test and post-test knowledge scores.

knowledge score was only 18.57% (5.57 ± 1.51), whereas the post-test mean knowledge score was 27.1% (8.13± 0.88) showing an increase of 8.53% (2.56 ±0.63) in the mean knowledge score.

The overall findings revealed that the mean percentage of post-test score was more on compared to the mean percentage of the pre-test score. The effectiveness of self-instructional module was observed most of the areas, which is also supported by the findings of Barlow R, in which education was given to the nurses.[10] The difference between the pre-test and posttest knowledge score was analyzed using paired 't' test. The difference was found to be highly significant (t = 11.66). A significant increase was observed in the knowledge score after administration of selfinstructional module. Findings suggest that the selfinstructional module was effective in improving the knowledge which is similar to the findings of Udmala V (2002) in which self-instructional module was effective on awareness of AIDS education package for women's health groups.[11]

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