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Original Research Article

Evaluate the Effectiveness of Structured Teaching Programme on Knowledge regarding management of Violent patients among the Nursing Students at selected Colleges, Bangalore.

Mr. Khrawborlang Warjri

Lecturer, Rama College of Nursing, Rama University, Kanpur

Abstract

An evaluative approach with one group pre-test post-test design was used for the study to evaluate the effectiveness of structured teaching programme on knowledge regarding management of violent patients among the nursing students at selected college. The sample consists of 60 nursing students selected by purposive sampling method. Data was collected by administering a structured knowledge questionnaire prepared by the investigator. In the present study, the post-test mean knowledge score was found higher (X_2= 26) than compared with pre-test mean knowledge score(X_1= 17). The 't' value computed (t= 30.61; p<0.001) showed significant difference suggesting that the STP was effective in increasing the knowledge of nursing students regarding the management of violent patient. The mean post-test area wise scores (X_2= 14 and 12) respectively were higher than the mean pre-test area wise score (X_1= 9.33 and 7.67).

Keywords: Structured Teaching Programme, Management of Violent patient.

Introduction

Violence is a psychiatric emergency which is being defined as "an intentional use of physical force or power, actual or threatened, against oneself, another person, or against a group or community that either results in or has a high likelihood of resulting in injury, death, psychological harm, mal-development, or deprivation"[1].

Violent or threatening behavior is a frequent reason for admission to a psychiatric inpatient facility, and that behavior may continue after the admission [2].

Violent behaviour is commonly seen in several disorders: Organic psychiatric disorders (like delirium, dementia, and Wernicke-Korsakoff's psychosis) and other psychiatric disorders (like schizophrenia, mania, depression, withdrawal from alcohol and drugs, epilepsy and personality disorders) [3].

Nurses, students practicing in clinical environments and medical staff in general work closely with all kinds of patients, their relatives, friends and other visitors. This places them easily within range of a physical assault. However, knowing what the risk factors for a person to be aggressive or violent – the most important fact in risk assessment – can reduce attacks and injuries towards staff [4]

Managing patient with violent aggressive behaviour is a challenge for nurses, especially for nursing students[5]. As a student, they were prepared to deal with patient's emotions but not with violence and aggression, and were not experienced or knowledgeable enough to deal with violent and aggressive behaviour. So, training in violence and aggression management with mandatory updates is much needed. Such training also focus on de-escalation techniques and recognition of risk [5]. Thus, a structured teaching programme was designed and evaluated for the nursing students to be more aware of the risk factors for violence and strategies for predicting aggressive behaviours, to know how to deal with violence and aggression so that the safety of patients and staff is being maintained.

Objectives of the Study

1. To assess the level of knowledge among nursing students regarding management of violent patient.
2. To administer structured teaching program for the nursing students on management of violent patient.
3. To evaluate the effectiveness of structured teaching program by comparing the pre-test and the post-test scores.
4. To find out the association between the knowledge scores of nursing students and the selected demographic variables.

Hypothesis

H1: There will be significant difference between pre-test and post-test level of knowledge scores in management of violent patients among nursing students.

H2: There will be significant association between the level of knowledge scores and selected demographic variables.

Methodology

Research approach

Evaluative approach was used for the present study. The present study was aimed at evaluating the effectiveness of structured teaching program on the knowledge regarding management of violent patient among the nursing students at selected college, Bangalore.

Research design

The research design adopted for this study was Pre experimental (one group pre -test post - test) design.

Selected group	Pre-test	Intervention	Post-test
Third year GNM nursing students	Q1	X	Q2

Q1 = Assessment of the knowledge regarding management of violent patient among the nursing students using structured knowledge questionnaire before the intervention structured teaching program.
Q2 = Assessment of the knowledge regarding management of violent patient among the nursing students by using self-administered knowledge questionnaire after the intervention of structured teaching program.
X = Intervention. (Structured teaching program)

Setting of the study

The study was conducted in Manjunatha School of Nursing in Bangalore. 60 samples were selected and prior information was obtained from the concerned authorities for conducting the study.

Sampling

The sample for study comprised of 60 nursing students studying for third year GNM nursing was selected by using purposive sampling technique.

Tool description

Tools used:
1. Closed ended questionnaire.
2. STP on management of violent patient.

The questionnaire was prepared in English. The tool consisted of two parts; such as demographic data and the structured knowledge questionnaire. The structured knowledge questionnaire consists of two parts.

Part I: Demographic Data
It consists of eight items seeking general information about the age, gender, religion, marital status, family type, locality, previous encounter with a violent patient and additional knowledge of the students.
Part II: The structured knowledge questionnaire

A structured knowledge questionnaire to assess the knowledge regarding management of violent patient among the nursing students consists of 40 multiple choice questions. Each question is having three options from which instructions were clearly written to choose the best options. Each correct item was scored as "1" and "0" for wrong response. Thus a total 40 were allotted for knowledge item. The areas covered are:
Section A: Concept of violence, risk factors causing violence and identification of violent behaviour.
Section B: Management and prevention of a violent patient.
STP: The contents of the STP includes concept of violence, the different forms of aggression, risk factors, causes, warning signs, consequences, prevention and management of violent patient.

Validity and Reliability

The content validity of an instrument is essential based on the adequate coverage of content area and the judgment of experts on the subject matter in the present study, the entire section was validated by experts, including 1 Psychiatrist, 1 Psychologist and 6 Nursing experts in the department of mental health nursing, statistician and an English language expert. The experts were requested to check the relevance of the items in the tool namely demographic data and the structured knowledge questionnaire and also to make suggestions on the structured teaching program on knowledge regarding the management of violent patient. Based on the recommendations, few items were modified. The audio visual aids were prepared and validated by the experts. The final draft of STP was prepared after incorporating expert's suggestions.

The reliability of the tool was established by assessing he data collected from 6 nursing students from R.R. School of nursing, Bangalore. Then the scores obtained were correlated. Reliability was computed using Karl person's correlation co-efficient method. The reliability obtained was 0.16, which proved that the tool was reliable. Hence the tool was found to be feasible for the main study.

Data Collection Procedure

The data collection was scheduled from 11.3.2015 to 17.3.2015. Before the data collection the investigator obtained the formal permission from the concerned authority of the school of nursing. Investigator visited the nursing students at selected college of nursing at Bangalore; introduced himself and purpose of the study was explained to the subjects and the consent was obtained. Pre-test was conducted using structured knowledge questionnaire on the first day. Subsequently, structured teaching programme was administered for duration of 45 minutes. Structured teaching programme is a

systematically planned group instructions by lecture cum discussion method designed to provide information regarding management of violent patient. On the 7th day, post test was conducted by using same structured knowledge questionnaire.

Results

1. **Description of the demographic variable.**

The age distribution of samples shows that 45% of the samples were aged 20-21 years, 41.7% were aged about 22-23 years, 10% were in between 24-25 years and 3.3% were 18-19 years old. Most of the respondents were female (76.7%) and only 23.3% were male. According to their religion, 35% were Hindu, 28.3% were from Christianity, 33.3% were from Muslim and 3.3% were Buddhism. All the respondents were single (100%) no one is married. 81.7% of the respondents were living in a nuclear family and 18.3% were from joint family, 58.3% students were from rural and 41.7% were from urban area, Data regarding previous encounter with a violent patient, it shows that 28.3% of the students had encounter with a violent patient and 71.7% of the students had no previous encounter with a violent patient. Data regarding additional knowledge, 91.7% of the students had no additional knowledge regarding the management of violent patient and only 8.3% had undergone any educational programme regarding the management of violent patient.

2. **Assessment of knowledge before the introduction of structured teaching programme.**

The knowledge regarding management of violent patient before the introduction of structured teaching programme shows that 73.3% of the respondents had inadequate knowledge scores (scores less than 50%), 25% had moderately adequate knowledge (scores between 50% and 75%) and 1.7% had adequate knowledge (scores above 75%).

The overall mean knowledge score of participants in pre-test was 17 mean percentage was 42.5% with the standard deviation 4.43 and range of pre-test knowledge scores was 10-30.

3. **Assessment of knowledge after the introduction of STP.**

The knowledge regarding management of violent patient after the introduction of structured teaching programme shows that none of the respondents had inadequate knowledge scores (scores less than 50%), 80% of the respondents had moderately adequate knowledge (scores between 50% and 75%) and 20% had adequate knowledge (scores above 75%). It indicates a considerable gain in knowledge and the effectiveness of the STP.

The overall mean knowledge score of participants in post-test was 26, mean percentage was 65% with the standard deviation 4.30 and range of post-test knowledge scores was 20-35.

The highest mean knowledge score (66.67%) was found with regards to the concept of violence, risk factors causing violence and identification of violent behaviour. The lowest mean knowledge score (63.16%) with regard to the management and prevention of a violent patient.

4. **Comparison of pre and post-test knowledge.**

In the pre-test, 44% of the respondents had inadequate knowledge but none of the respondents had inadequate knowledge in the post-test. Also, 80% of the respondents in the post-test and 25% of the respondent in the pre-test had moderately adequate level of knowledge. 1.7% of the respondents had adequate knowledge in the pre-test and 20% of the subjects had adequate knowledge in the post-test. It indicates a considerable gain in knowledge scores and the effectiveness of the Structured Teaching Programme.

The Figure 1 shows the area wise pre and post test mean knowledge scores of the respondents. The overall post-test mean knowledge score was found to be higher (65% and SD of 4.306) when compared with the overall pre-test mean knowledge score value (42.5% and SD of 4.430). The range of knowledge during post-test (20-35) was higher than the range of knowledge during the pre-test (10-30).

5. **Assessment of the effectiveness of the structured teaching programme.**

The overall mean knowledge enhancement scores of the respondent were 22.5%. The enhancement mean knowledge score was found highest (62%) in aspect of post action, followed by the consequences of violence (33.33), concept of violence (29.6%), the causes (26.6%), management and prevention aspect (22.65%), forms of aggression (15%), warning signs (8.33%) and the lowest mean knowledge enhancement score (7.5%) on risk factors.

The statistical paired ‘t’ test implies that there is a significant difference in the pre-test and post-test knowledge scores ($p<0.001$). The mean knowledge enhancement score was 22.5% with paired ‘t’ value of 30.61.The enhancement mean knowledge score was found 11.67% in aspect of concept of violence, risk factors causing violence and identification of violent behaviour; and 10.83% mean knowledge enhancement in the aspect of management and prevention of a violent patient. There exists a statistical significance in the enhancement of knowledge scores indicating the positive impact of the intervention programme.

The hypothesis (H1) stated in the study (H1: There will be significant difference between pre-test and post-test level of knowledge scores in management of violent patients among nursing students) is

accepted since there is significant change found between the pre and post-test knowledge scores.

6. **Association of pre-test knowledge with demographic variables.**

The pre-test knowledge of respondent has no significant association with the demographic variables such as age (χ^2=5.553), gender (χ^2=3.265), religion (χ^2=6.1417), marital status (χ^2=0), family type (χ^2=0.69), locality (χ^2=0.38), previous encounter with a violent patient (χ^2=0.045) and additional knowledge (χ^2=1.216).

The hypothesis (H2) stated in the study (H2: There will be significant association between the level of knowledge scores and selected demographic variables) is rejected since there is no significant impact of selected demographic variables on pre-test knowledge scores of respondents regarding management of violent patient.

Discussion

In the present study, 45% of the samples were aged 20-21 years, 41.7% were aged about 22-23 years, 10% were in between 24-25 years and 3.3% were 18-19 years old. Most of the respondents were female (76.7%) and only 23.3% were male. With regard to religion, 35% were Hindu, 28.3% were from Christianity, 33.3% were from Muslim and 3.3% were Buddhism. All the respondents were single (100%) no one is married. Regarding family type, 81.7% of the respondents were living in a nuclear family and 18.3% were from joint family. With regard to the locality, 58.3% students were from rural and 41.7% were from urban area. Data regarding previous encounter with a violent patient, it shows that 28.3% of the students had encounter with a violent patient and 71.7% of the students had no previous encounter with a violent patient. Also, 91.7% of the students had no additional knowledge regarding the management of violent patient and only 8.3% had undergone any educational programme regarding the management of violent patient.

A similar study was conducted by Camel H and Hunter M which showed that all subjects were female. None of the subjects had previous formal training in prevention and managing aggressive behaviour. In the pre-test, 73.3% of the respondents had inadequate knowledge scores (scores less than 50%), 25% had moderately adequate knowledge (scores between 50% and 75%) and only 1.7% had adequate knowledge (scores above 75%). The present study confirms the overall mean knowledge score of participants in pre-test was (17), mean percentage was (42.5%) with the standard deviation 4.43 and range of pre-test knowledge scores was 10-30. Nau et al. (2007) explored how nursing students experience patient aggression. He conducted a study on the development and testing of a training course in aggression for nursing students With regard to students' preparation specific problems were revealed such as lack of knowledge and lack of instructors offering learning opportunities to help nursing student to develop skills in aggression management [5].

The present study confirms that there was an improvement of knowledge after the administration of STP and is statistically significant. None of the respondents had inadequate knowledge scores (scores less than 50%), 80% of the respondents had moderately adequate knowledge (scores between 50% and 75%) and 20% had adequate knowledge (scores above 75%). The overall mean knowledge score of participants in post-test was (26), mean percentage was (65%) with the standard deviation 4.30 and range of post-test knowledge scores was 20-35. It indicates a considerable gain in knowledge and the effectiveness of STP.

Similar study was conducted by Grenyer BFS on the development and evaluation of an aggression and violence minimisation programme for mental health nurses. The results showed that the staffs were satisfied and increased their knowledge, skills and attitude towards with working with aggressive patients on areas of general aggression and violence, violence minimisation competencies, and confidence in dealing with the aggressive patients [8].

The overall post-test mean knowledge score was found to be higher (65% and SD of 4.306) when compared with the overall pre-test mean knowledge score value (42.5% and SD of 4.430). The range of knowledge during post-test (20-35) was higher than the range of knowledge during the pre-test (10-30). It indicates a considerable gain in knowledge and the effectiveness of STP. A similar study conducted by Gately, Laura A on Psychology Students' Training in the Management of Potentially Violent Clients. Client violence has been reported as one of student practitioners' greatest concerns. This study examined counselling and clinical psychology graduate students' exposure to client violence, perceptions of training received in managing potentially violent clients, and confidence in working with this population. Students reported that their training in the management of potentially violent clients was inadequate and that their confidence in working with this population was low. A positive correlation between perception of training and confidence in managing potentially violent clients provides support for more comprehensive training efforts for students in the management of potentially violent clients [9].

The statistical paired ‘t’ test implies that the difference in the pre-test and post-test knowledge scores found statistically significant at 0.1%

($p<0.001$). The mean knowledge enhancement score was 22.5% with paired 't' value of 30.61. There exists a statistical significance in the enhancement of knowledge scores indicating the positive impact of the intervention programme. Naveen Kumar Sharma conducted a similar study on effectiveness of structured teaching program on knowledge regarding epilepsy in children among school teachers. The mean post test score 36.10 was higher than the mean pre test score 25.38. The computed ''t'' value 23.321, indicated that there was a significant difference between pre test and post test knowledge score. The findings identified that there was no significant association between pre test knowledge score of teachers and the selected personal variables, which shows the knowledge of school teachers was independent of selected personal variables. This study revealed that the knowledge of teachers regarding epilepsy in children was inadequate and was increased after the administration of STP. Thus the research hypothesis was accepted [10].

The study shows that the pre-test knowledge of respondent has no significant association with the demographic variables such as age ($\chi2=5.553$), gender ($\chi2=3.265$), religion ($\chi2=6.1417$), marital status ($\chi2=0$), family type ($\chi2=0.69$), locality ($\chi2=0.38$), previous encounter with a violent patient ($\chi2=0.045$) and additional knowledge ($\chi2=1.216$).

These findings were consistent with the findings from other studies. These findings suggest that the improvement of the nursing students' knowledge level regarding management of violent patient was the effect of STP and not based on any of the sample characteristics such as age, gender, religion, marital status, family type, locality, previous encounter with a violent patient and additional knowledge.

Recommendations

- A similar study can be undertaken on larger scale.
- An experimental study can be undertaken with a control group for effective comparison of the result.
- Manuals, information leaflets and self instructional modules may be developed in all dimensions and aspects of management of violent patient.
- An explorative study may be conducted to identify the awareness of nursing students on management of violent patient.
- A study can be carried out to evaluate the effectiveness of various teaching strategies like SIM, leaflets on management of violent patient.

Conclusion

The findings of the study proved that nursing students in general had limited knowledge regarding the management of violent patient. The mean post-test knowledge proved that the structured teaching programme given by the investigator helped them to improve their knowledge.The effectiveness of STP was tested in terms of gain in knowledge and the findings showed that it was statistically significance at 0.001 level.

Hence, the structured teaching programme prepared by the investigator was effective in improving the knowledge of nursing students. Researches like this should be encouraged so that the nursing students are made aware of their roles in caring for a mentally ill patient. Many problems can be minimized or prevented if nursing students are properly educated.

Reference

[1] Krug et al, "World report on violence and health", Wayback Machine, World Health Organization. 2002; 15, 08, 22.
[2] Binder, R. L. & McNiel, D. E. "Staff gender and risk of assault on doctors and nurses", Bulletin of the American Academy of Psychiatry & the Law, vol. 22, no. 4, 1994; pp. 545-550.
[3] Ahuja Niraj. A short textbook of psychiatry, 6 ed. Jaypee Brothers Medical publications. New Delhi. 2006; p. 241-2.
[4] Ferns, T. Characteristics of people who assault nurses in clinical practice. In Nursing Standard. 2007; 21, 50, 35-39.
[5] Nau, Johannes & Dassen, Theo & Needham, Ian & Halfens, Ruud. The development and testing of a training course in aggression for nursing students: A pre- and post-test study. Nurse education today. 29. 196-207. 10.1016/j.nedt.2008.08.011.
[6] McHale S. From insult to injury. Nursing Times. 1999; 95, 49, 30.
[7] Carmel H, Hunter M. Compliance with training in managing assaulting behaviour and injuries from inpatient violence. Hospital Community Psychiatry 1999; 41:558-60
[8] Grenyer BFS, Illkiw-Laville O, Bino P, Coleman M. Safer at work development and evaluation of an aggression and violence minimisation programme. Australian New Zealand Journal of Psychiatry 2004; 389(10):804.
[9] Gately, Laura A.; Stabb, Sally D. Training suggestions are presented. Psychology Students' Training in the Management of Potentially Violent Clients. Professional Psychology: Research and Practice, Vol 36(6), Dec 2005, 681-687.
[10] Naveen Kumar Sharma; K. Lakshmi Prasanna; Ashok Kumar. Effectiveness of Structured Teaching Program on Knowledge Regarding Epilepsy in Children among school teachers. IOSR Journal of Nursing and Health Science (IOSR-JNHS) e-ISSN: 2320–1959.p- ISSN: 2320–1940 Volume 2, Issue 6 (Nov. – Dec. 2013), PP 07-13.