

**“A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME REGARDING PSYCHOTROPIC DRUGS AND ITS NURSING MANAGEMENT AMONG STAFF NURSES AT TERTIARY CARE TEACHING HOSPITALS, KUPPAM, AP.”**

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**ABSTRACT:**

**Background of the study:** Nurses have a crucial role in managing psychiatric patients, which includes administering drugs, handling psychotropic medications, and educating family members. They require substantial knowledge and skills to effectively fulfill these responsibilities. Nurses also hold a central role in providing medication education to patients and their families. **Aim:** A study was conducted to evaluate the impact of a structured teaching program on the management of psychotropic drugs among staff nurses at tertiary care teaching hospitals in Kuppam, Andhra Pradesh. **Methods:** The study utilized a pre-experimental design with a one-group pre-test-post-test approach. A total of 150 staff nurses were conveniently

sampled from tertiary care teaching hospitals. Data collection involved a self-administered knowledge questionnaire. Following this, a structured teaching session on psychotropic drugs and nursing management lasting 15-20 minutes was conducted. A post-test using the same knowledge questionnaire was administered after 7 days. Descriptive statistics, paired t-tests, and chi-square analysis were employed for data analysis. **Result of the study:** During pretest, 11 (7.33%) had adequate level of knowledge, 57 (38.00%) had moderately adequate knowledge and 87 (54.67%) had inadequate knowledge about psychotropic drugs and its nursing management. After the structured teaching programme, the assessment conducted 7 days later revealed that 11 (7.33%) of the staff nurses had adequate knowledge, 82 (54.67%) showed moderately adequate knowledge, and 57 (38.00%) demonstrated inadequate knowledge regarding psychotropic drugs and their nursing management. A significant difference was observed between the pre- and post-test assessments following the structured teaching programme. The average score before the programme, with a standard deviation, was  $(16.87 \pm 8.06)$ , while after the programme, it was  $(18.40 \pm 7.40)$ . This indicates that the structured teaching programme on psychotropic drugs and nursing management was effective. The knowledge scores of staff nurses showed a notable improvement ( $t = 12.95$ ) following the programme. **Conclusion:** The study's conclusion is that the structured teaching programme successfully improved the knowledge of staff nurses regarding psychotropic drugs and their nursing management.

**Key words:** Psychotropic drugs, Structured teaching programme, staff nurses.

### **Introduction:**

Psychotropic drugs are medications that profoundly impact mental functions<sup>1</sup>. Psychopharmacology stands as the cornerstone in treating neurobiological disorders<sup>2</sup>. This field has integrated psychiatric disorder treatment into modern medical practices. Since 1853 sedatives and hypnotics were used in the treatment of psychosis. However, the discovery of modern psychotropic drugs began in the year 1950 with the introduction of chlorpromazine, lithium, and imipramine.<sup>3</sup> Psychotropics are primarily classified based on their intended use as antidepressant, antipsychotic, and sedatives. Psychotropic medications are not intended to provide cure to mental illness. They act by balancing the level of the neurotransmitters and achieve stability in the activity of the patient.<sup>1,2</sup> The side effects of psychotropic drugs may be fatal or nonfatal. Common side effects are drowsiness, weight gain, and extrapyramidal symptoms such as muscular rigidity, akathisia, tardive dyskinesia, motor inertia, dystonia, and tremors.<sup>4</sup>

Nurses play a crucial role in managing psychiatric patients, which includes administering medications, handling psychotropic drugs, and educating family members. They require extensive knowledge and skills to carry out their responsibilities effectively. Nurses also play a vital role in educating patients and their families about medications, maintaining therapeutic relationships, and monitoring for potential side effects. In nursing practice, medication errors are commonly attributed to human mistakes, although systemic issues are increasingly recognized as contributing factors. Addressing medication errors is essential for enhancing patient safety and improving healthcare delivery. There are several reports that indicate that nurses contribute to medication errors.<sup>1</sup> The factors responsible for such errors are insufficient knowledge about drugs<sup>5</sup> lack of proper training, non-reporting of medication errors committed by their colleagues and health-care professionals<sup>6</sup> and mere negligence during the administration of drugs.<sup>5</sup> Previous studies from India reported poor knowledge scores regarding psychotropics among nurses<sup>7</sup> and in 66% of the medication error instances, nurses were reportedly responsible. The current study aimed to assess the knowledge and safe handling of psychotropics among nurses working in a tertiary care neuropsychiatric center. This study also assessed the effectiveness of a Structured Teaching Program (STP) on nurses' knowledge about psychotropic drugs and subsequent knowledge in handling it for their practice.

### **Objectives of the study**

1. To assess and compare the knowledge regarding psychotropic drugs and its nursing management among staff nurses before and after exposure to structured teaching programme.
2. To determine the association between pre test levels of knowledge regarding psychotropic drugs and its nursing management among staff nurses with their selected demographic variables.

### **Hypotheses:**

**RH1:** The mean post-test knowledge score of staff nurses receiving STP on Psychotropic Drugs And Its Nursing Management will be significantly higher than the mean pre-test knowledge score.

**RH2:** There will be significant association between pretest levels of Structured Teaching Programme Regarding Psychotropic Drugs And Its Nursing Management with their selected demographic variables among staff nurses.

### **Material and Methods**

**Research Approach:** The study employed an evaluative approach to assess the impact of a structured teaching program on staff nurses' understanding of psychotropic drugs and their management at tertiary care teaching hospitals in AP.

**Research Design:** The study utilized a pre-experimental design with a one-group pre-test and post-test format.

**Research Setting:** Tertiary level hospitals in Kuppam.

**Population:**

**Target population:** The study focused on all staff nurses employed at tertiary care teaching hospitals in Kuppam.

**Accessible population:** The accessible population for the study included staff nurses currently employed at tertiary care teaching hospitals in Kuppam.

**Sample:** The study sample consists of staff nurses employed at tertiary care teaching hospitals in Kuppam, Andhra Pradesh, who meet the inclusion criteria.

**Sample Size:** The sample size for the present study was calculated by using power analysis and the researcher has taken 150 staff nurses as sample size at tertiary teaching hospitals, Kuppam.

**Sampling Technique:** The study used a non-probability convenient sampling method to select the participants.

**Sample Selection Criteria:**

**Inclusion Criteria:**

1. Staff Nurses who are willing to participate in the study.
2. Staff nurses who are working in PES hospital

**Exclusion Criteria:**

1. Staff nurses not available during study period.
2. Staff nurses who are sick during study period.

**Research Variables:** The variables under study are independent variable, dependent variable

and demographical variables

**Independent variable:** Structured teaching programme on regarding psychotropic drugs and its nursing management.

**Dependent variable:** Knowledge of staff nurses regarding regarding psychotropic drugs and its nursing management.

**Demographic variables:** It encompasses variables such as age, gender, professional qualifications, area of practice, work experience in general wards and psychiatric wards, and exposure to any other educational programs related to psychotropic drugs and their nursing management.

**Content validity:** The validity of the tools was ensured through consultation with experts in the field of psychiatric nursing. Their suggestions and advice were carefully considered and incorporated to refine the tools.

**Reliability:** Reliability refers to the consistency exhibited by the instrument. The tools were administered to 11 subjects in a comparable setting at the tertiary teaching hospital in Kuppam. Feedback indicated that the tool was clear and easily understood, with participants typically requiring 20-30 minutes to complete it. Test-retest reliability was assessed using Cronbach's alpha formula, yielding a reliability coefficient of  $r = 0.79$ .

**Ethical Clearance:** Ethical clearances were obtained from the institutional human ethics committee, at tertiary care teaching hospital, Kuppam.

**Pilot Study:** Pilot study was conducted from 11.10.2023 to 16.10.2023 in PES hospital in Male medicine ward third floor at Kuppam, Researcher conducted pilot study among 15 staff nurses who fulfills the inclusion criteria has been selected and assigned as study samples.

### **Data Collection Procedure**

The study took place from October 29, 2023, to November 18, 2023, at tertiary care teaching hospitals in Kuppam, Andhra Pradesh. Formal permission was obtained from the medical director of the tertiary care teaching hospitals in Kuppam, Andhra Pradesh, prior to commencement. 150 staff nurses were selected by using convenient sampling method, who fulfills the inclusion criteria. And the researcher was explained the purpose of the study to the staff nurses. A pre-test was conducted to staff nurses by

using structured questionnaire to determine the level of knowledge regarding psychotropic drugs and its nursing management. Following the structured teaching program, a post-test was administered using the same tool.

## Results

The data organized and presented under the following:

**Section–I:** Frequency and percentage distribution of the socio- demographic variables among staff nurses.

**Section–II:** Frequency and percentage distribution of pre- test and post-test knowledge scores on psychotropic drugs and its nursing management among staff nurses.

**Section–III:** Comparison of pre and post tests mean SD “t” and p-values knowledge score on psychotropic drugs and its nursing management among staff nurses.

**Section–IV:** Association between pre-test knowledge scores on psychotropic drugs and its nursing management among staff nurses with their selected demographic variables.

**Section–I: Frequency and percentage distribution of the socio- demographic variables among staff nurses.**

<b>N (150)</b>			
<b>S.NO</b>	<b>DEMOGRAPHIC VARIABLES</b>	<b>FREQUENCY (F)</b>	<b>PERCENTAGE (%)</b>
<b>1</b>	<b>Age of the staff nurse</b>		
	a. < 30 years	115	76.67
	b. 30-40 years	31	20.67
	c. > 40years	04	2.66
<b>2</b>	<b>Gender</b>		
	a. Male	03	02

	b. Female	147	98
<b>3</b>	<b>Religion</b>		
	a. Hindu	82	54.67
	b. Muslim	12	8
	c. Christian	52	34.67
	d. Any other	4	2.66
<b>4</b>	<b>Professional qualification</b>		
	a. Diploma in nursing	33	22
	b. Post B.Sc. nursing	29	19.33
	c. B.Sc. Nursing	77	51.34
	d. M.Sc. nursing	11	7.33
<b>5</b>	<b>Marital status</b>		
	a. Married	52	34.67
	b. Unmarried	34	60.67
	c. Separated	05	3.33
	d. Widow	02	1.33
<b>6</b>	<b>Clinical Experience in years</b>		
	a. 1-5 years	107	71.33
	b. 6-10 years	35	23.33
	c. 11-15 years	06	04
	d. Above 15 years	02	1.33
<b>7</b>	<b>Monthly Income (in Rupees)</b>		
	a. 5,000 - 10,000	22	14
	b. 10,001 - 15,000	84	56

	c. 15,001 - 20,000	30	20
	d. Above 20,000	14	10
<b>8</b>	<b>Previous source of Knowledge</b>		
	a. Worked in psychiatric hospital	30	20
	b. In- service education	30	20
	c. Through peer	17	12
	d. Mass media	14	12
	e. During the nursing course.	55	36

**Section–II: Frequency and percentage distribution of pre- test and post-test knowledge scores on psychotropic drugs and its nursing management among staff nurses.**

**N (150)**

Knowledge regarding Psychotropic drugs and its Nursing Management among staff nurses	Frequency (f)		Percentage (%)	
	Pre-test	Post -test	Pre-test	Post-test
In Adequate knowledge	82	57	54.67	38.00
Moderate knowledge	57	82	38.00 %	54.67
adequate knowledge	11	11	7.33 %	7.33

**Section–III: Comparison of pre and post tests mean SD “t” and p-values knowledge score on psychotropic drugs and its nursing management among staff nurses.**

The comparisons of calculated paired t test values of mean SD and “t” and p-values of pre -test and post- test knowledge scores of psychotropic drugs and its nursing management revealed that the pre –test mean score were 16.87 with a SD of 18.40 and



post test mean score 8.06 with a SD of 7.40 and “t” value of 12.95 were significant at the level of  $p < 0.000$ . Hence the above findings support the H1 hypothesis, so the researcher accepts the H1 hypothesis.

#### **Section–IV: Association between pre-test knowledge scores on psychotropic drugs and its nursing management among staff nurses with their selected demographic variables.**

The calculated  $\chi^2$  values of the levels of pre test score among staff nurses with their demographic variables revealed that age at the level of ( $p > 0.313$ ) gender at the level of ( $p > 0.851$ ) religion at the level of ( $p > 0.160$ ) professional qualification at the level of ( $p > 0.065$ ) clinical experience at the level of ( $p > 0.256$ ) monthly income at the level of ( $p > 0.070$ ) previous source of knowledge ( $p > 0.039$ ) regarding psychotropic drugs and its nursing management were not found to be significant and marital status at the level of ( $p > 0.000$ ) was found significant. Hence the above findings support the H2 hypothesis, so the researcher accepts the H2 hypothesis.

#### **Discussion:**

The first objective of the study was to assess and compare the knowledge regarding psychotropic drugs and its nursing management among staff nurses before and after exposure to structured teaching programme. In pretest majority 82 (54.67%) of them were had inadequate knowledge scores, 57 (38.00 %) of them were had moderate knowledge, 11 (7.33 %) of them were had adequate knowledge. In post test majority 82 (54.67%) of them were had moderate knowledge, 11 (7.33%) of them were had adequate knowledge and 57 (38.00%) of them were had inadequate knowledge.

The second aim of the study was to explore how pre-test knowledge levels about psychotropic drugs and their nursing management among staff nurses correlate with their selected demographic variables. Calculated paired “t” test values of mean SD and p-values of pre -test and post- test on knowledge scores on psychotropic drugs reveals that the post –test mean score were 18.40 with a SD of 7.40 and pre-test mean 16.87 with a SD of 8.06 the “t” value was 12.9501 and p value were significant at the level of  $p < 0.000$ . Hence the stated hypothesis “RH1: There will be significant difference between the pre and post - test knowledge scores on psychotropic drugs and its nursing management among staff nurses was accepted and revealed that the structured teaching programme enhances the knowledge on psychotropic drugs and its nursing management among staff nurses.

In this study, the analysis showed that there was no significant association between the pre-test knowledge score about psychotropic drugs and nursing management among staff

nurses, except for marital status ( $p < 0.001$ ) and previous source of knowledge ( $p > 0.039$ ). Specifically, age ( $p > 0.313$ ), gender ( $p > 0.851$ ), religion ( $p > 0.160$ ), professional qualification ( $p > 0.065$ ), clinical experience ( $p > 0.256$ ), monthly income ( $p > 0.070$ ) were not statistically significant. RH2: There will be significant association between pre-test knowledge scores regarding psychotropic drugs and its nursing management among staff nurses with their demographic variables was accepted and revealed that the structured teaching programme enhances the knowledge on psychotropic drugs and its nursing management among staff nurses.

### **Conclusion:**

The overall percentage and mean score of knowledge regarding psychotropic drugs and its nursing management among staff nurses in post-test was higher than the pre-test. The primary aim of this study is to evaluate how effective a structured teaching program is in enhancing staff nurses' knowledge about psychotropic drugs and their nursing management. The study's findings indicate that the structured teaching program successfully improved the knowledge of staff nurses in a significant manner. This study provided the baseline assessment of knowledge and safe handling of psychotropic drugs of nursing staff. The improvement in knowledge and skills attained through the program may translate into better nursing care. The results of the study revealed that the STP toward knowledge and safe handling of psychotropic drugs was effective in improving the knowledge of staff nurses. Continuing nursing education on psychotropic drugs and their safe handling may result in better psychiatric nursing care outcomes.

### **References**

1. Lieberman JA, Tasman A. Handbook of Psychiatric Drugs 2006 England: John Wiley & Sons Publishers;
2. Good Therapy. . Typical and Atypical Antipsychotic Drugs Last accessed on 2018 Oct 29 Available from: <https://www.goodtherapy.org/drugs/anti-psychotics.html>.
3. Sathyanarayana Rao TS, Andrade C. Classification of psychotropic drugs: Problems, solutions, and more problems Indian J Psychiatry. 2016;58:111–3C Here PubMed | CrossRef
4. Antipsychotic. 2018 Last accessed on 2018 Oct 29 Available from: <https://www.en.wikipedia.org/wiki/Antipsychotic>
5. Vallerand AH. Davis's Drug Guide for Nurses 2018 16th Philadelphia: FA Davis Publishers;
6. National Institute of Mental Health. . Mental Health Medications 2018 Last accessed on 2018 Oct 29 Available from: <https://www.nimh.nih.gov/health/topics/mental->

health-medications/index.shtml.

7. Oklahoma Association of Clinical Nurse Specialists – OACNS. Psychotropics 2018 Last accessed on 2018 Oct 29 Available from: <https://www.oacns.org/resources/Pictures/06-Williams-Evans,Psychotropic%20Medications%20in%20Older%20Adults.pdf>
8. Vatsal Upadhyay. A Study to Assess the Effectiveness of Planned Teaching Program on Management of Adverse Effects of Antipsychotics in Terms of Knowledge and Attitude among the Staff Nurses working in Govt. Hospital for Mental Health at Gujarat State. International Journal of Nursing Education and Research. 2022; 10(2):144-6. doi: 10.52711/2454-2660.2022.00034