A Descriptive Study to Assessment of Knowledge on Psychotropic Drugs among B. Sc. Nursing 3rd Year and GNM 2nd Year Students: at NRI College of Nursing, Bhopal, MP

Neha Yogesh Yadav

Department of Mental Health Nursing, Asharam College of Nursing, Kamptee, Nagpur, Maharashtra, India

Email: yneha25242[at]gmail.com

Abstract: **Aim of the study:** The study aims to find the knowledge on Selected Psychotropic Drugs Among B. Sc. Nursing 3rd Year and GNM 2nd Year Students of NRI College Of Nursing, Bhopal (Mp) With A View to Develop an Information Booklet on Psychotropic Drugs. **Objectives:** 1) Assess the learning needs of Nursing Students regarding Psychotropic drugs. 2) Develop a self - instructional module for Nursing Students regarding Psychotropic drugs. 3) Evaluate the effectiveness of the self - instructional module for Nursing Students regarding Psychotropic drugs. **Hypothesis:** H01 – There is no significant difference between the pre - test and post - test knowledge of Nursing Students regarding psychotropic drug. H02– There is no significant association between the demographic variables of Nursing Students and their post - test knowledge scores regarding psychotropic drug. **Methodology:** The research design refers to the researcher’s overall plan for obtaining answers to the research questions and for testing the research hypothesis. The research design spells out the strategies that the researcher adopts to develop information that is accurate, objective and interpretable. The research designs provide an overall blueprint to carry out the study. For the present study the design was a Descriptive design, which includes Manipulation, Descriptive and no Randomization. **Results:** The data were analyzed and interpreted in terms of objectives formulated descriptive and inferential statistics were used for data analysis. The majority of the respondents 16 (32%) were in the age group of 21 - 25 years, 15 (30%) were getting information from doctors, 8 (16%) were getting information from library sources, Majority of respondents income were 10001 to 15000, 26 (54%), 12 (24%) having income 15001 to 20000, 7 (14%) were income was 5000 to 10000 and 5 (10%) were having income more than 20000. In the pre - test, respondent knowledge regarding psychotropic drug’s meaning, uses and doses 10 respondents were having the mean percent is 4.34 and SD is 1.25. Knowledge regarding action and route of administration the mean is 2.94 and SD is 0.91, Knowledge regarding types, classifications of drugs the mean is 1.8 and SD is 0.88, Knowledge regarding side effects and nurses’ responsibilities the mean percent is 3.86 and SD is 1.03. The overall knowledge mean percent is 12.94 and SD is 2.16. In pre test majority of respondent knowledge were adequate in 17 (34%), 23 (46%) were having inadequate knowledge and 10 (20%) were having moderately knowledge. The findings of the study revealed that there was no significant association between pre - test knowledge scores with selected socio - demographic variables such as age (x2=4.403), gender (x2=2.207), Professional qualification (x2=7.934), professional experience (x2=7.405), In - service education (x2=0.852), at 0.05 level of significance. **Conclusion:** The findings of the study concluded that there was no significant association between pre - test knowledge scores with selected socio - demographic variables such as age (x2 =4.403), gender (x2=2.207), Professional qualification (x2=7.934), professional experience (x2=7.405), In - service education (x2=0.852), at 0.05 level of significance

Keywords: Psychotropic Drug, Information Booklet, Anti - psychotic Drugs, Anti - depressant Drug

1. Introduction

“The time when psychiatrists considered that they could cure the mentally ill is gone. In the future the mentally ill have to learn to live with their illness.”

Norman Sartorius, president of the World Psychiatric Association (1996 - 1999)

In the early 1950s, a few obscure chemicals tested in the back wards of mental hospitals ushered in the modern era of psychotropic drug treatments for mental disorders. Today, medication with antipsychotic drugs has become the principal form of treatment used in mental hospitals, nursing homes, institutions for the retarded, and board and care homes that house the mentally ill. After the antipsychotics came lithium, the antidepressants, and the minor tranquilizers. Each year more than one - fifth of non - institutionalized adults receive prescriptions for psychotropic drugs.

Psycho - pharmacologic medications are drugs that affect brain activities associated with mental processes and behavior. These drugs are also called “psychoactive” or “psychotherapeutic” medications. For clarity, we will refer to this class of drugs throughout our study as “psychotropics.” Psychoactive medications are divided into four broad categories: anti - psychotic antidepressant, anti - anxiety, and hypnotic Medication may be an effective part of the treatment program for many psychiatric disorders of childhood and adolescence.

Today’s newer psychotropic drugs are considered safer and more effective than older medications. Psychotropic means, literally, “mind - turning” from psyche (mind) and trope (a turning). In Stedman’s Medical Dictionary (1987, Williams and Wilkins) it is defined as “affecting the mind, denoting drugs used in the treatment of mental illness”. They are used in clinical ways to modify mood, cognition, or behavior. Psychotropic drugs can be used either therapeutically or they can be illicit, recreational drugs are:
Anti - psychotic Drugs. Anti - psychotic medications are used to treat various psychoses and neurologic condition. Anti - depressant Drugs. Anti - depressant drugs are usually used in the treatment of depression and agitation. Anti - anxiety and Hypnotic Drugs. Anti - anxiety drugs are used for the short - term management of anxiety and insomnia. Recently introduced psychotropic drugs reflect an increased understanding of the biological/biochemical mechanisms of the psychiatric disorders they target. This knowledge enables development of therapeutic agents with greater specificity for the molecular mechanisms involved, resulting in increased effectiveness and fewer untoward side effects. Psychotropic drug development continues at a rapid pace as the knowledge base of neuroscience and clinical research continues to expand.

2. Need for the Study

Psychotropic drugs have revolutionized the treatment of mental illness, perhaps most profoundly in schizophrenia and depression. Psychotropic is a word derived from the Greek psyche, meaning the mind, and troops, to turn or change. Psychotropic drugs are used to treat people with: 1) Clearly diagnosed primary psychiatric illness as defined by the Diagnostic and Statistics Manual of Mental Disorders, (DSM - IV); 2) certain medical conditions - - such as specific types of epilepsy; 3) emotionally distressing and extreme behavior which drastically interfere with a person's ability to function; 4) severe dysfunctions resistant to other types of treatment; 5) withdrawal difficulties associated with other psychotropic medications, alcohol, nicotine, caffeine, and opiates; and 6) sedation during dental or medical procedures not requiring anesthetics. Psychotropic drugs fall into four primary categories: antipsychotics, mood stabilizers, anti - anxiety agents, and antidepressants. Each drug is specifically designed and/or prescribed to alter abnormal thought (such as hallucinations, delusions, distortions, and paranoia), abnormal moods (such as extremes of euphoria and depression), and disruptive behaviors (especially those caused by delusions of grandeur or paranoia).

Mental illnesses have been recorded throughout history: Babylonians and Egyptians believed demonic possession to be the cause and used magic, religious rites, or plants and herbs as "cures" Hippocrates attributed "hysteria" to a woman's uterus, and 3 blamed "melancholia" (depression) on black bile, which he attempted to treat with purgatives. Roman writer, Cicero (106 - 43 B. C.), defied these theories by suggesting melancholia was psychological and that individuals were responsible for the way they thought or felt. Thus began the conflict about the cause of mental illness - - was it psychological and treatable with "talk therapy" (psychotherapy); or was it biological requiring medication? While this discussion still rages today and psychotherapy plays an important role in the treatment of many mental illnesses, psychotropic drugs have positively affected the lives of millions of mentally ill people previously untreatable.

3. Review of Literature

A cross - sectional analysis of the prospective, multicenter cohort study was conducted on potentially inappropriate use of psychotropic medications in hospitalized elderly patients in France. The objective of study was to study the consumption of 'potentially inappropriate medication' (pim) among patients 19 20 aged or 75 years, paying particular attention to psychotropic drugs and the factors influencing the use of 'potentially inappropriate psychotropics' (pips). the number of patients who had taken at least one psychotropic drug in the 2 weeks before hospitalization was 589 (50.1%). more than half of both the 510 patients with a depressive syndrome and the 543 patients affected by dementia were treated with psychotropics nineteen percent of all psychotropics prescribed were pips. of these pips, 66.5% were anxiolytics, 28.4% were antidepressants and 5.1% were antipsychotics. The study concluded that the elderly, who have multiple comorbidities, complex chronic conditions and are usually receiving polypharmacy, are at increased risk for adverse drug events. Regular review of prescriptions would help optimize prescription of psychotropics in the elderly.

Assumption:
1) The nursing students will be having some less knowledge regarding Psychotropic drugs.
2) The information booklet regarding psychotropic drugs will impart the knowledge of nursing students. So that they will impart this knowledge to other newly qualified nurses, when they become senior.

Limitation:
- Studying at NRI College of Nursing, Bhopal (MP).
- Willing to participate in the study
- Available at the time of data collection

Hypothesis
H01 – There is no significant difference between the pre - test and post - test knowledge of nursing students regarding psychotropic drug.
H02– There is no significant association between the demographic variables of nursing students and their post - test knowledge scores regarding psychotropic drug.

4. Methodology

Research approach: An evaluative approach was used for this study

Research design: A descriptive design was adopted for the study.

Variables:
Independent variable: Informational booklet.
Dependent variable: Knowledge of nursing students regarding psychotropic drugs.

Setting of the study - The study was conducted in NRI College of Nursing, Bhopal (MP). The setting was chosen on the basis of feasibility in terms of availability of the
nursing students who are studying at NRI College of Nursing, Bhopal (MP).

Population of the study: The term population refers to “the aggregate or mass of subjects upon which the researcher intended to generalize the findings.

The samples: for this study consisted of nursing students who are studying at NRI College of Nursing, Bhopal (MP). 38 Sample is a subset of population. The sample size consists of 50 nursing students who are studying at NRI College of Nursing, Bhopal (MP).

Sampling technique: Sampling technique is an important step in the research process. It is the process of selecting representative units or subsets of a population of the study in research.

Stratified sampling technique was used to select the sample.

Criteria for sample selection: The criteria for sample selection are mainly depicted under two heading, which includes the Inclusion criteria

Inclusion criteria
- All the nursing students of NRI College of Nursing, Bhopal (MP).
- Nursing students who are willing to participate in the study.
- 50 nursing students are selected for study.

Exclusive criteria
- NRI College of Nursing, Bhopal (MP), nursing students those who are not willing to participate.
- NRI College of Nursing, Bhopal (MP), nursing students those who are not available at the time of data collection.

Tool preparation:
After an extensive review of literature, discussion with the experts the self - administered knowledge questionnaire and the informational booklet on psychotropic drugs has prepared.

The tool consisted of two sections

Section A: It comprised of 7 items seeking information on demographic data such as age, gender, professional qualification, professional experience, in - service education, source of information, and income.

Section B: It consists of a structured knowledge questionnaire on psychotropic drugs among staff nurses, which comprised of 30 items of knowledge.

Scoring technique: The questionnaire consisted of 30 items of knowledge, closed ended – multiple choice questions for knowledge questionnaire with a single correct answer. Every correct answer was awarded a score of one (1) and every incorrect / unanswered item was awarded zero (0). The maximum score of knowledge questionnaire was thirty (30) and minimum score is zero (0).

Development of Information booklet: Information booklet was developed based on extensive review of related literature and objectives stated for knowledge test. The Information booklet consists of objectives and guidelines.

Content validity: refers to the degree to which an instrument measures what it is supposed to measure. Content validity refers to the degree to which the items in an instrument adequately represent the universe of content. To ensure content validity of the tool, the tools like demographic data, self - administered knowledge questionnaire regarding psychotropic drugs were submitted to eight nursing experts. Their suggestions were taken into consideration and the modifications were incorporated in the final preparation of the structured knowledge questionnaire regarding psychotropic drugs.

Reliability of the tool: Reliability is the degree of consistency or accuracy with which an instrument measures the attribute which it designs to measure. Reliability of the structured knowledge questionnaire was established by the semi structural questionnaire method. Co - efficient of correlation for the two sets of scores was done with the help of Karl Pearson’s formula, where ‘r’ value obtained was 0.75 which showed that the tool was highly reliable.

Pilot study: For the present study, the investigator selected NRI College of Nursing, Bhopal (MP). Formal approval was obtained from the principal of NRI College of Nursing, Bhopal (MP) for the pilot study. The investigator selected 5 samples by probability stratified sampling technique. After a brief self - introduction, the investigator explained the purpose of the study. Good rapport was established. The investigator conducted the pre - test and doubts were clarified. After that, Information booklet was given to the nursing students and explanation was also given. Time taken to answer the questions including the demographic data was 40 - 45 minutes. The statistical analysis of the pilot study showed that the obtained ‘t’ value is 10 which was highly significant at p<0.001. This signifies the feasibility to conduct the main study.

Data collection procedure: Data collection is the gathering of information needed to address research problem. Formal written permission was obtained from the principal of NRI College of Nursing, Bhopal (MP), for conducting the study. The method of data collection adopted for the study was self - administered knowledge questionnaire. The participants of the study where 50 nursing students were selected as per stratified sampling method. The data were collected from 15/4/2021 to 15/5/2021, after brief introduction of self, the investigator explained the purpose of the study.

Plan for data analysis: - The data obtained was analyzed on the basis of the objectives of the study using descriptive and inferential statistics.

Descriptive statistics:
1) Frequency and percentage distribution of demographic variables were done.
2) Mean and standard deviation were used to determine pre - test knowledge.
3) Distribution of scores on level of knowledge regarding psychotropic drugs among nursing students.

Inferential Statistics:
Chi – square test was used to determine the relationship between assessments of pre - test knowledge with corresponding demographic data.

5. Results

Organization of the data: The collected data is tabulated, analyzed, organized and presented under the following sections:

Section 1 - Distribution of the nursing student according to socio - demographic variables

The findings of the study revealed that there was no significant association between pre - test knowledge scores with selected socio - demographic variables such as age (x² =4.403), gender (x²=2.207), professional qualification (x²=7.934), In - service education (x²=0.852), at 0.05 level of significance. So the null hypothesis (H₀) was accepted for above variables.

6. Summary

Section 1: distribution of the nursing students according to socio - demographic variables
The majority of the respondents 16 (32%) were in the age group of 21 - 25 years, 15 (30%) were getting information from doctors, 8 (16%) were getting information from library sources, Majority of respondents income were 10001 to 15000, 26 (54%), 12 (24%) having income 15001 to 20000, 7 (14%) where income was 5000 to 10000 and 5 (10%) were having income more than 20000.

Section II: assessment of knowledge of nursing students regarding psychotropic drugs.

In the pre - test respondent’s knowledge regarding psychotropic drugs’ meaning, uses and doses 10 respondents were having the mean percent is 4.34 and SD is 1.25, Knowledge regarding action and route of administration the mean is 2.94 and SD is 0.91, Knowledge regarding types, classifications of drugs the mean is 1.8 and SD is 0.88, Knowledge regarding side effects and nurses’
responsibilities the mean percent is 3.86 and SD is 1.03. The overall knowledge mean percent is 12.94 and SD is 2.16.

In pretest majority of respondents knowledge were adequate in 17 (34%), 23 (46%) were having in adequate knowledge and 10 (20%) were having moderately.

Section III: association between the selected demographic variables and the level of knowledge.

The findings of the study revealed that there was no significant association between pre - test knowledge scores with selected socio - demographic variables such as age ($\chi^2$ =4.403), gender ($\chi^2$=2.207), Professional qualification ($\chi^2$=7.934), professional experience ($\chi^2$=7.405), In - service education ($\chi^2$=0.852), at 0.05 level of significance.

7. Recommendations

1) Public awareness about stroke prevention should be maintained through mass media, booklets, and brochures.
2) Health education about stroke, warning signs and symptoms, risk factors, prevention of complications and immediate action on should be introduced among high - risk people in different settings.
3) Community based studies are required in the future including both urban and rural population to confirm the findings
4) The study can be replicated on a large scale for wider generalizations.
5) The study can be conducted on the basis of assessing knowledge, attitude and practice.
6) A similar study can be done with control group.

References

[8] Devid cohen (university de montreal) Social service review page no (4 - 5)
[12] www.pubmed. com (Camilla Malyn Haw, Geoff dickens and geanstibbs)
[13] www.springerlink. com/journals article (journal of autism and development disorder page no. - 1 - 2)

[20] Sorenson L, Gulmann, Department of psychiatry. www.pubmed. com
[25] Stokes J, Robert MS, Department of psychiatry, Queensland university, Australia, www.pubmed. com
[34] Hsaio GY, Chen IJ, Department of nursing, www.pubmed. com
[38] Marra C. nimmo, Childrens and womens hospital, British, www.pubmed. com