



## EFFECT OF INFORMATION BOOKLET ON KNOWLEDGE REGARDING INOTROPIC DRUGS AMONG B.Sc. NURSING STUDENTS

### Nursing

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### ABSTRACT

A study to assess the effectiveness of information booklet in terms of gain in knowledge regarding the action, side effects and nurse's responsibility of Inotropic drugs among B.Sc nursing second year students in selected nursing colleges of Indore. The study utilized an evaluative approach with pre-experimental one group pre-test and post-test design. The present study aims at evaluating the effectiveness of Information Booklet on knowledge regarding the action, side effects and nurse's responsibility of Inotropic drugs among B.Sc nursing second year students. The sample size consists of 40 B.Sc Nursing second year students. A Simple random sampling (lottery method) was used to select the samples. The main study findings shows significant increase in knowledge of B.Sc Nursing second year students regarding the action, side effects and nurse's responsibilities of Inotropic drugs, after administration of Information booklet. The total mean score secured by the B.Sc Nursing second year students in pre-test was 11.75 on a scale of 1-30. The mean post test knowledge score was 17.76. The paired 't' test computed is  $t = 7.35$  which was significant at  $P \leq 0.001$  and degree of freedom 39. The value of Standard Deviation in pre-test was 3.14 and the value of Standard Deviation in post test was 4.58.

### KEYWORDS

Inotropic drugs, knowledge, nursing students.

### INTRODUCTION

Cardio Vascular diseases are one of the major health issue in which the world facing today, so it need emergency care. It is one of the major causes of death and disability in the world, Killing 17.5 million people a year and over 23 million predicted death from cardiac diseases by 2030.

Heart failure is a major public health problem in developed nations. The cardiovascular conditions which appears an increasing prevalence and incidence in North America and Europe. In the United States, Heart Failure is responsible for almost 1 million hospital admissions and 50,000 deaths annually. Cardiovascular diseases (CVD's) have become the leading cause of mortality in India also. According to the American Heart Association's 2017, the number of people diagnosed with heart failure is increasing and projected to rise by 46% by 2030, it results more than 8 million people who are suffering with heart failure. Inotropic drugs are one of the main drugs which are used for congestive heart failure, although knowledge about inotropic drug is very important because it have lot of immediate actions and side effects. So close observation of patient, Monitoring vital signs and therapeutic serum level of medication is important while administrating for prolonged use. Some side effects are GI upset, arrhythmias, drowsiness, vision changes, ventricular fibrillation, pericarditis etc. Medication error of these drugs may cause sudden cardiac arrest. So nursing students should have good knowledge about inotropic drugs is very essential.

Janice, L. H., & Kerry, H.C. (2014) mentioned that After the administration of Beta blockers may produce a number of side effects includes dizziness, hypotension, bradycardia, fatigue and depression. Most common side effects are develop in initial few weeks of treatment. Because of potential side effects, beta blockers are started at low dose. The dose is titrated for increase the dose. Nurses should educate patients about potential symptoms during the initial phase of treatment and stress that adjustment of drug may take several weeks. Nurses must provide support patients going through this symptom provoking phase of treatment. Beta blockers are used caution in patients with a history of Broncho spastic diseases such as bronchial asthma because it may cause bronchiole constriction.

Investigator also felt that teaching programme is essential to improve the B.Sc. Nursing second year student's knowledge and skill to prevent the side effects related to inotropic drugs. This will improve to provide effective cardiac care. This study also helps the B.Sc. Nursing second year students regarding the action, nurse's responsibility and side effects of Inotropic drugs through the help of Information booklet.

### MATERIALS AND METHODS

In the present study the investigator has adopted one group pre-test post- test design was used to assess the effectiveness of information booklet of gain in knowledge regarding the action, side effects and

nursing responsibilities of Inotropic Drugs among B.Sc. Nursing Second year students in selected nursing colleges of Indore. To conduct the research study in Government College of Nursing C.R.P Line, Indore for formal written permission was obtained from the concerned authority of college before data collection. Data collection was held in Government College of Nursing C.R.P Line Indore. A sample of 40 B.Sc. nursing second year students was selected using simple random sampling technique (lottery method). The investigator introduced her and the purpose of the study was explained to the B.Sc. nursing second year students and informed consent was obtained. The pre-test was given using a Structured Knowledge Questionnaire. The time taken to complete questionnaire was 20 – 30 minutes. Immediately after the pre-test the investigator introduced the topic and administered information booklet regarding the action, side effects and nurse's responsibility of inotropic drugs. After giving the information booklet the date of post- test was informed to the students. The post – test was conducted on the 7<sup>th</sup> day after the pre-test to evaluate the effectiveness of Information Booklet using the same tool as used for pre-test. The average time taken for the post- test knowledge questionnaire was 15 – 20 minutes.

### RESULTS

#### Socio Demographic Data Of Study Subjects

Collected data reveals that most of the samples 72.5% were in the age group of 18 -20 years, 27.5% were between the age group of 21-23 years, none of the samples were in the age group of 24-26 and above 26.

Most of the samples 95% were higher secondary passed, 5% were B.Sc. graduation. It is evident that the majority of the samples 57.5% were English medium and 42.5% were Hindi medium.

Regarding Clinical posting in cardiology department had completed were 67.5% and 32.5% were not yet completed. Data shows that source of gaining knowledge about Inotropic drugs from Internet is 32.5% and from Books 67.5%. The samples had no previous knowledge through any kind of in service education like workshop, conference etc.

#### Effect Of Information Booklet In Terms Of Gain In Knowledge Scores

**Table No: 1: Mean, Standard Deviation And 't' Value Of Pretest And Post-test Knowledge Score Of Samples (n=40)**

Knowledge Score	Mean	Standard Deviation	Mean Difference	Degree of freedom (df)	Paired 't' value
Pre Test	11.75	3.14	6.01	39	7.74**
Post Test	17.76	4.58			

$df = 39, t_{39} = 3.55, P \leq 0.001$  \*\*Significant

The data presented in table No.1 shows that the mean post-test knowledge score (17.76) is significantly higher than the mean pre-test

knowledge score (11.75). The dispersion of pre test scores ( $SD \pm 3.14$ ) is more than that of post- test scores ( $SD \pm 4.58$ ) and the computed paired 't' value shows there was a significant difference between pre-test and post – test mean knowledge score.

#### Association Between Pre-test Knowledge Score And Selected Demographic Variables

In order to find out the association between pre-test knowledge score and selected demographic variables, chi-square test was used. The findings shows there is no significant association between pre- test knowledge score and selected demographic variables at the  $P \leq 0.05$  level. Hypothesis were formulated that the mean post-test knowledge score of the samples will be significantly higher than mean pre-test knowledge score i.e. Research hypothesis ( $H_1$ ) and there was no significant difference between mean pre-test knowledge score and mean post-test knowledge score i.e. Null hypothesis ( $H_0$ ). The findings of the present study proved that mean post-test knowledge score (17.76) was higher than mean pre-test knowledge score (11.75). Hence the Null hypothesis ( $H_0$ ) was rejected and the Research hypothesis ( $H_1$ ) accepted. This indicates Information booklet was effective in increasing knowledge score of the B.Sc. nursing Second year students.

#### DISCUSSION

The study throws light on the knowledge regarding the action, sideeffects, and nurse's responsibilities of inotropic drugs among BSc Nursing second year students. There is a lot of scope for exploration in this area. There is a need for extended and extensive research to assess the knowledge regarding in different areas of inotropic drugs. Research can be conducted to detect the knowledge and practices of the student's nurses about the action, side effects and nurse's responsibilities of inotropic drugs.

A similar study was conducted by Banerjee, S. & David, A. (2010) at Indo American Cancer Hospital, Hyderabad, AP, India to assess the effectiveness of information booklet designed on various aspects of palliative care on their knowledge were selected 100 nurses and used through purposive sampling technique. The result revealed the post test score (Mean 21.78) were significantly higher than the pretest knowledge (Mean 12.71) the developed information booklet was highly effective ( $t = 19.77$ ) in enhancing the knowledge. Out of the 100 nurses only 8 of the nurses received specialized training in palliative care.

Moreover, in India only a few studies were conducted on this particular topic. This study will serve as a valuable reference material for future investigators. Dissemination of findings through conferences and professional journals will make the application of research findings to be effective.

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