



THE EFFECT OF STRUCTURE TEACHING PROGRAM ON KNOWLEDGE REGARDING CLINICAL PATHWAY OF HYPERTENSION AMONG THE STAFF NURSES WORKING IN THE SELECTED HOSPITALS OF JAMMU.

Dr. Santosh Kumar Gurjar¹

(Doctor of Philosophy in Nursing)

Professor Desh Bhagat University Mandi Gobingarh Punjab

Sheetal Kumari²

(Ph. D Research Scholar Nursing)

Desh Bhagat University Mandi Gobingarh Punjab

Dr. Masood Ahmad Sheikh³

(Doctor of Philosophy in Nursing)

Desh Bhagat University Mandi Gobingarh Punjab

Abstract

Hypertension is a disease that imposes risks of diseases on multi-system. Failure to control hypertension leads patients to end up with unavoidable complications, including death. Noncompliance to treatment is the main factor to develop such devastating complications whereas knowledge of patients about their disease is a key factor for better compliance. Hypertension is the common types of cardiovascular disease associated with high blood pressure. On the basis of this literature a quasi-experimental study was conducted to assess the effectiveness of Structure teaching program on knowledge regarding clinical pathway of hypertension among staff nurses working in selected Hospitals of Jammu. The aim of the study was to identify the effect of structure teaching program on knowledge regarding clinical pathway of hypertension among the staff nurses. The findings showed that in pretest 73.3% were having average and 26.7% were having good knowledge. Respectively while as In posttest, 11.7% were having average and 88.3% were having good knowledge. Study also concluded that, Structured teaching program was very effective on knowledge regarding clinical pathway of hypertension among staff nurses working in selected Hospitals of Jammu.

Key words: Assess, Effect, Knowledge, Hypertension, Nursing

1. INTRODUCTION

An estimated 1.28 billion peoples aged 30-79 years worldwide have hypertension, most living in low and middle-income countries. An estimated 46% of adults with hypertension are unaware about their condition. Less than half of the adults (42%) with hypertension are diagnosed and treated. It is found that 1 in 5 adults (21%) with hypertension have it under control. Hypertension is one of the main causes of premature death worldwide. One of the global targets for noncommunicable diseases is to reduce the prevalence of hypertension by 33% between 2010 and 2030¹.

There are four categories of blood pressure such as; normal (systolic ≤ 120 and diastolic ≤ 80 mm of Hg), elevated (systolic 120-129 and diastolic ≤ 80 mm of Hg), hypertension stage 1 (systolic 130-139 and diastolic 80-89 mm of hg), hypertension stage 2 (systolic ≥ 140 and diastolic ≥ 90 mm of hg), hypertension crisis (systolic > 180 and diastolic > 120 mm of hg). The prevalence of hypertension the prevalence of hypertension increased with age, from 7.5% among adults aged 18–39 to 33.2% among those aged 40–59, and 63.1% among those aged 60 and over. A similar pattern was found in both the sexes².

The ubiquity of age-adjusted hypertension in survey period 2017–2018 showed 45.4% among adults and was higher among men (51.0%) than women (39.7%). Hypertension increased with age: 22.4% (aged 18–39), 54.5% (40–59), and 74.5% (60 and over)³.

Raised blood pressure (BP) is responsible for 7.6 million deaths every year worldwide (13.5% of the total), more than any other risk factors. Around 54% of stroke and 47% of coronary heart disease are attributable to high BP⁴.

A greater percentage of men (50%) have high blood pressure than women (44%). High blood pressure is more common in non-Hispanic black adults (56%) than in non-Hispanic white adults (48%), non-Hispanic Asian adults (46%), or Hispanic adults (39%)⁵.

In India, high blood pressure is one of the main causes of premature deaths. The rates of hypertension in percentage are increase to go up to 22.9 and 23.6 in Indian, men and women, respectively by 2025. The total number of adults suffering from hypertension increased from 594 million in 1975 to 1.13 billion in 2015, with the increase seen largely in low- and middle-income countries. This increase is due to mainly a rise in hypertension risk factors in those populations⁶.

As per study was done in the month of June 2015 at selected hospital. There were sample total 50 staff nurses. The aim of the study was to assess the effect of structure teaching on knowledge of hypertension among the staff nurses. The tool was used demographic variables and structured knowledge questions regarding hypertension. Results shows for the study only 36% staff nurses had good knowledge and 56% had average knowledge and 8% had poor knowledge scores significantly observed. The study concluded that, structured teaching program should be conducted and provide knowledge regarding hypertension among the staff nurses⁷.

A study was conducted in selected hospitals of Amritsar, Punjab. The aim of the study was to evaluate the effectiveness of structured teaching program on knowledge regarding hypertension and its management among hypertensive patients. Preexperimental design of one group pre-test and posttest research design was adopted for the study. The data was collected using the purposive sampling technique from 100 size of sample, which was selected from the medical wards of GND and civil hospital Amritsar, Punjab, India. The result found that the overall pre-test mean knowledge score was 8.72 and SD 3.92. post-test result, mean score was 13.75 with SD 3.92. The study concluded that, hypertensive clients need to improve knowledge regarding hypertension and its management through structure teaching program⁸.

2. OBJECTIVES OF THE STUDY

- To assess the pre-test and post-test knowledge scores among Staff Nurses regarding clinical pathway of hypertension among staff nurses working in selected Hospitals of Jammu.
- To determine the effectiveness of Structured Teaching Programme on knowledge regarding clinical pathway of hypertension among staff nurses working in selected Hospitals of Jammu.
- To find out the association between pre-test knowledge scores with selected demographic variables.

3. REVIEW OF LITERATURE REVIEW OF LITERATURE FOR THE PRESENT STUDY WAS ORGANIZED UNDER FOLLOWING

1. Review of literature related to clinical pathway of hypertension.

2. Review of literature related to knowledge among staff nurses regarding hypertension.

3. Review of literature related to effect of structure teaching program on knowledge regarding clinical pathway of hypertension.

1. Review of literature related to clinical pathway of hypertension.

- In this part, 3 national journal and 7 international journals. The overall studies of part A, suggested that clinical pathway of hypertension had significant benefits for recovery in patients.⁹

2. Review of literature related to knowledge among staff nurses regarding hypertension.

- The overall studies of part B, concluded that nurses gained knowledge regarding hypertension.¹⁰

3. Review of literature related to effect of structure teaching program on knowledge regarding clinical pathway of hypertension.

- In this part, 3 national and 3 international journals. The overall study concluded that structure teaching program improved knowledge regarding clinical pathway of hypertension.¹¹

4. RESEARCH METHODOLOGY

4.1 Aim

To identify the effect of structure teaching program on knowledge regarding clinical pathway of hypertension among staff nurses working in the selected hospitals of Jammu.

4.2 Study design

The researcher has adopted a quasi-experimental pretest post-test one-group research design

4.3 Sampling and recruitment

Sixty study subjects were selected by using a non-probability purposive sampling technique.

4.4 Data collection

Informed consent was explained and obtained from the participants. Before starting the session approach of the statement, objectives of the study were explained to the subject. Consent was taken from each subject after proper explanation in order to maintain the confidentiality. Ten subjects were taken for each day from 06/01/24 to 19/01/24. A pre-test was conducted prior intervention (structure teaching program) and after pretest structure teaching program was imparted for samples regarding meaning, purposes, elements of clinical pathway and clinical pathway of hypertension by using various AV aids (flashcards, charts and leaflets) for 15 minutes and posttest was conducted on 12/01/24 by using the same tool.

4.5 Data analysis

The investigator analyzed the information in terms of data by using descriptive and inferential statistics and presented them in tables, graphs and figures. The subsequent set up analysis was done with the assistance of opinion of experts. The knowledge was calculated by using frequency and percentage while as knowledge mean score was calculated by using mean, median, variance and t test and then association was found by using fisher's exact method with designated demographic variable.

4.6 Rigour and ethical approval

The research proposal presented before ethical Institution and the title was approved by ethical committee. The researcher got the approval from Research Ethical Committee of the institute in order to conduct the study.

5.RESULTS

DESCRIPTION OF SAMPLES (STAFF NURSES) BASED ON THEIR PERSONAL CHARACTERISTICS.

Table 1: Description of samples (staff nurses) based on their personal characteristics in terms of frequency and percentage

Demographic variables	Frequency	Percentage (%)
AGE		
21-30 Years	30	50.00%
31-40 years	15	25.00%
41-50 Years	15	25.00%
GENDER		
Female	60	100.00%
Educational Status		
GNM	32	53.3%
B. Sc	0	10.0%
PB. B. Sc	14	23.3%
M. Sc	08	13.3%
Experience		
1-5 Years	28	46.6%
6-10 Years	16	26.6%
11-15 Years	16	26.6%

The majority of samples 50% of the staff nurses were in the age group of 21-30 years, out of them 100% were females, 53.3% of them were GNM, 46.7% of them were having 1-5 years of experience.

ANALYSIS OF DATA RELATED TO THE KNOWLEDGE**Table 2: Frequency and distribution of pretest and posttest with regard to the knowledge score.****N=60**

knowledge item	Pretest		Posttest	
	Frequency	percentage	Frequency	percentage
Clinical Pathway	39	65.0%	46	76.7%
Main purpose of clinical Pathway	38	63.3%	46	76.7%
Elements of clinical pathway	39	65.0%	47	78.3%
Meaning of Variance	38	63.3%	49	81.7%
Components of clinical pathway	44	73.3%	49	81.7%
Normal Blood pressure	39	65.0%	49	81.7%
Comes under the hypertension stage 2 in adult	36	60.0%	49	81.7%
hypertension	34	56.7%	48	80.0%
Risk factor for Hypertension	37	61.7%	47	78.3%
Symptoms of Hypertension	41	68.3%	46	76.7%
Detect the hypertension in complete blood test	39	65.0%	46	76.7%
Antihypertensive medications are used to control the hypertension	42	70.0%	47	78.3%
diet to be followed for hypertension	42	70.0%	48	80.0%
Type of exercises is helpful for hypertension patient	35	58.3%	47	78.3%
Instrument used to measure BP	36	60.0%	44	73.3%
Prevent the hypertension	30	50.0%	42	70.0%
Complications of hypertension	33	55.0%	44	73.3%
Responsibilities of health care workers if a patient develops variance in clinical pathway	39	65.0%	46	76.7%
Responsible for documenting the	38	63.3%	45	75.0%

clinical pathway				
Clinical pathway-based care	36	60.0%	41	68.3%
First step nurse takes in a clinical pathway-based care	36	60.0%	39	65.0%

The data presented in the table revealed that In the pre-test, 73.3% of them knew the components of clinical pathway while as In the post-test, the majority 81.7% of them knew the meaning of variance, components of clinical pathway, normal blood pressure, and about the stage 2 hypertension.

Table 3: Mean, SD and Paired t-test to analysis the effectiveness of structure teaching program on knowledge regarding clinical pathway of hypertension among the staff nurses working in selected Hospitals of Jammu.

N=60

Criteria	Mean	SD	t	df	P value
pretest	13.2	1.6	24.5	59	<0.001
posttest	16.1	1.4			

According to table no.3, Researcher applied paired t-test for the effect to analyse the data with regard to the effectiveness of structure teaching program on knowledge regarding clinical pathway of hypertension among the staff nurses. The data in the table showed that average knowledge score in pretest was 13.2 which increased to 16.1 in posttest. t-value for this test was 24.5 with 59 degrees of freedom. level of significance <0.001. Corresponding p-value was small (less than 0.05), the null hypothesis was rejected.

ASSOCIATION OF KNOWLEDGE WITH SELECTED DEMOGRAPHIC VARIABLES.

Table 4: Fisher's exact test for association of knowledge with selected demographic variables. N=60

Demographic variable	Knowledge		P-value
	Average	Good	
Age	21-30 years	23	0.051
	31-40 years	8	
	41-50 years	13	
Educational status	GNM	29	0.613
	BSC	6	
	MSC	7	
	PB. BSC	11	
Experience	1-5 years	27	0.125
	6-10 years	12	
	11-15 years	14	

The data portrayed in the table 4 revealed that all the p-values were less (less than 0.05), the demographic variable were found to have significant association with the knowledge among staff nurses working in selected hospitals regarding clinical pathway of hypertension.

6. DISCUSSION

A similar study was conducted in the month of June 2015 at selected hospital of Mumbai city. There sample was 50 staff nurses selected for this study. The aim of the study was to assess the effectiveness of structure teaching programme on knowledge regarding hypertension among staff nurses. First part of the tool was used with regard to demographic data i.e., age, gender, height, weight, BMI, dietary pattern, family history of cardiovascular disease, stress, history of hypertension, medicine. Second part of tool was consisted of meaning of hypertension, causes, risk factors, complications and life style modifications. The result showed that, out of total 50 staff nurses only 18 (36%) staff nurses had good knowledge scores, 28 (56%) had average knowledge and 4 (8%) had poor knowledge scores. The findings concluded that significant difference has been observed. To assess the difference in knowledge scores t-test was calculated, which is 20.5. The P value was <0.05. The study also concluded that, knowledge of hypertension among staff nurses has been improved after imparted structured teaching programme.

With regard to the present study which was conducted on 60 samples of staff nurses working in selected hospitals of Jammu. In pretest, 73.3% of the staff nurses had average knowledge (score 8-14) and 26.7% of them had good knowledge (Score 15- 21) regarding clinical pathway of hypertension. After conducted structure teaching program, in posttest, 11.7% of the staff nurses had average knowledge (score 8-14) and 88.3% of them had good knowledge (Score 15-21) regarding clinical pathway of hypertension. This indicates that the knowledge among staff nurses regarding clinical pathway of hypertension improved remarkably after the intervention in terms of structured teaching program.

7. CONCLUSION

The study was conducted to assess the effect of structure teaching program on knowledge regarding clinical pathway of hypertension among the staff nurses. Based on data collected and after statistical analysis, it was found that there is significant difference in pretest and posttest knowledge score (less than 0.05) hence null hypothesis is rejected, Which indicating that the structure teaching programme was highly effective in improving the knowledge regarding clinical pathway of hypertension among staff nurses. Now a days, nurses play vital role in management of hypertensive patient care, which involved all aspects of care including clinical pathway. So, as to reach long term goal with day-by-day systematic care helps to nurses increases their knowledge and improving practices. structure teaching program is one of the teaching methods, which is used to improve the knowledge regarding clinical pathway. The present study shows that, structure teaching is a useful and effective tool to gain knowledge regarding clinical pathway of hypertension among the staff nurses. Lack of knowledge regarding clinical pathway of hypertension can prevent to reach long term goal of treatment. Although, ongoing teaching and its implementation of evidence-based practice guideline shows increasing knowledge regarding clinical pathway of hypertension among staff nurses.

8. LIMITATION

1. The study was confined to small number of subjects and shorter period.
2. Setting for the study was limited.
3. Data collection period was limited.

9. RECOMMENDATION

1. A similar study can be conducted on a large sample for broader generalization.
2. A comparative study can be carried out to assess the factors leading to knowledge regarding clinical pathway of hypertension among staff nurses between rural and urban.

3. A similar study can be conducted by using different teaching modalities like self instructional module, booklet etc.
4. A video teaching program on knowledge regarding clinical pathway of hypertension among staff nurses can be conducted in large samples for better generalization.
5. A comparative study can be conducted to compare the effect of structured teaching program among experimental group and control group without intervention.

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