

A Study to Assess the Effectiveness of Structured Teaching Program on Knowledge Regarding Hypertension among GNM 1st Year Students at Hind School and College of Nursing, Safedabad at Barabanki, Uttar Pradesh

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ABSTRACT

Present research aims to assess the level of knowledge regarding Hypertension among GNM 1st year students, to evaluate the effectiveness of structured teaching program on knowledge regarding Hypertension among GNM 1st year students, to find out the association between pretest level of knowledge regarding Hypertension among GNM 1st year students with their selected demographical variables. Conceptual framework: The conceptual framework selected for this study is based on General System theory developed by Von Ludwing Bertalanffy (1968). Design: Quantitative approach pre- experimental pretest posttest one group research design. Setting: The study was conducted among GNM 1st year students at Hind School and College of Nursing, Safedabad, Barabanki, U.P. Sample Size: The Sample size was 60 and only one experimental group. Intervention: The intervention applied in this study was structured teaching program on knowledge regarding Hypertension. Tools: Self- structured questionnaires were used to assess the knowledge regarding Hypertension suggestion and opinion from experts were obtain to use the tool among GNM 1st year students.

KEYWORDS: Structured teaching program, hypertension, knowledge.

INTRODUCTION

Hypertension is high blood pressure or a higher- than-normal force of blood against walls blood vessel wall. Hypertension is second leading underlying cause of death (Smoking is first) but lifestyle changes can be amazingly effective at lowering high blood pressure.

Hypertension is a major public health problem due to high prevalence all around the globe around 7.5 million deaths or 12.8% of the total of all annual deaths worldwide occur due to high blood pressure. 27% are attributed to cardiovascular disease which affects 45% people in the 40- 69 age group. Hypertension has been documented as a major risk factor for cardiovascular morbidity and mortality and

lowering blood pressure (BP) with antihypertensive drug can reduce this risk.

Blood pressure is measure of two pressures, the systolic and Diastolic. The systolic pressure (the higher pressure and the first number recorded) is the force that blood exerts on the artery walls as the heart contracts to pump the blood to the peripheral organs and tissues. The diastolic pressure (the lower pressure and the second number recorded) is residual pressure exerted on the arteries as the heart relaxes between beats. A diagnosis of hypertension is made when blood pressure reaches or exceeds 140/90 mmHg (read as “140 over 90 mmHg).

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Hypertension is a “psychological classical silent killer” is the Hallmark of various cardiovascular disorder. Hypertension would become a greater Global burden in the next 15-20 year. If one believes that “old is gold” then yoga is quite effective and widely believed to reduce blood pressure. Health is holistic health is closely relatable. Which provide to important physical, mental, social, spiritual wellbeing and as a whole health.

NEED FOR THE STUDY

In India, nationally, more than 1 in 4 people have hypertension and cumulatively, more than 90% of adults (An estimated 1 in 25 youths ages 12-19 have hypertension. This is about 1.3 million adolescents in the United States.) with hypertension are either undiagnosed, untreated, or treated but with uncontrolled hypertension. Better understanding of the causes of hypertension helps researchers developed treatments to improved blood pressure management and prevent early death from cardiovascular disease.

In an analysis of worldwide data for the Global burden of the hypertension 20.6% of India Men and 20.9% of Indian women where suffering from hypertension in 2005. The rates for hypertension in percentages are projected to go up to 22.9 & 23.6 for India Men and Women by 2025.

In analysis of survey population of India adults age 18-54 for men and 18-49 year for women, the overall prevalence of hypertension increased by 2.3 times for 18.5% to 43% with the new guidelines. Overall, less than 50% of men and less than 60% of women had normal blood pressure according to the new guidelines.

“The 2023 ESH guidelines maintain the same BP grades classification as the 2018 ESC/ESH guidelines. The ESH recommends a threshold of > 140/90 mmHg (grade 1) for the diagnosis of hypertension, whereas the ACC/AHA guideline recommends a lower threshold of > 130/80 mmHg (stage1)”

ANALYSIS AND INTERPRETATION OF DATA

Hypothesis 1: There will be significant difference between pre-test and post-test knowledge score regarding prevention of hypertension among GNM-1st year students.

Table 10: Percentage of pretest level of knowledge regarding hypertension among GNM 1st year students in Experimental group

Knowledge level	Pre test	
	Frequency	Percentage
Inadequate knowledge	13	21.66
Moderate knowledge	46	76.66
Adequate knowledge	01	01.60

Adults are now considered to have high blood pressure if their numbers read 130/80 mmHg and higher. Under the old guidelines, high blood pressure was considered 140/90 or higher.

Objectives

The objectives of the study were:

- To assess the level of knowledge on hypertension among GNM 1st year students.
- To evaluate the effectiveness of structured teaching program on knowledge regarding hypertension among GNM 1st year students.
- To find out the association between pretest level of knowledge regarding hypertension among GNM 1st year students with their selected demographical variables.

Hypothesis

On the basis of the objectives, the following Hypotheses have been formulated.

H1: There will be significant differences between pretest and posttest level of knowledge regarding hypertension among GNM1st year students.

H2: There will be association between pretest level of knowledge regarding hypertension among GNM 1st year students and their selected demographical variables.

METHODOLOGY

Sample:

A sample is a small portion of population selected for observation and analysis. “Sampling refers to the process of selecting a portion of population to represent the entire population.”

Sample of this study where GNM 1st year students who meet inclusion criteria at Hind school and college of Nursing, Safedabad, Barabanki, UP.

Tools:

Tool used for the research was structured knowledge questionnaire.

Table 10: reveals that 13 students (21.66%) had inadequate knowledge regarding hypertension, 46 students (76.66%) had moderate knowledge regarding hypertension and 1 students (1.6%) had adequate knowledge regarding hypertension during Pre-test in the experimental group.

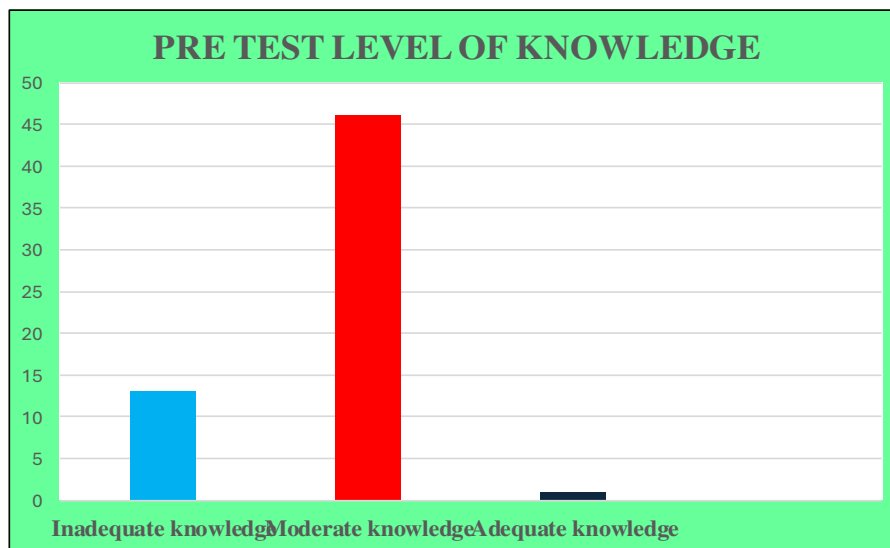


Figure 12: Frequency and percentage distribution of pretest level of knowledge regarding hypertension among GNM 1st year students in Experimental group

Figure 12 shows that regarding Pre-test level of knowledge regarding hypertension, 13 students (21.66%) had inadequate knowledge regarding hypertension, 46 students (76.66%) had moderate knowledge regarding hypertension and 1 students (1.6%) had adequate knowledge regarding hypertension during Pre-test in the experimental group.

Objective 2: To evaluate the effectiveness of structured teaching program on knowledge regarding hypertension among GNM 1st year students

Table 11: Percentage of post-test level of knowledge regarding hypertension among GNM 1st year students in Experimental group

Knowledge level	Post test	
	Frequency	Percentage
Inadequate knowledge	03	05
Moderate knowledge	31	51.66
Adequate knowledge	26	43.33

Table 11 reveals that 3 students (5%) had inadequate knowledge regarding hypertension, 31 students (51.66%) had moderate knowledge regarding hypertension and 26 students (43.33%) had adequate knowledge regarding hypertension during post-test in the experimental group.

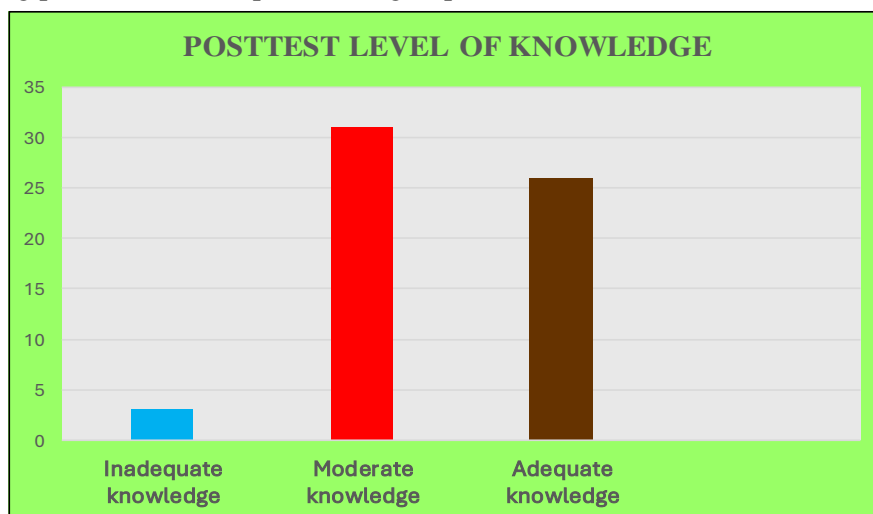


Figure 13: Frequency and percentage distribution of posttest level of knowledge regarding hypertension among GNM 1st year students in Experimental group

Figure 13: shows that **regarding post-test level of knowledge regarding hypertension** 3 students (5%) had inadequate knowledge regarding hypertension, 31 students (51.66%) had moderate knowledge regarding hypertension and 26 students (43.33%) had adequate knowledge regarding hypertension during post-test in the experimental group.

Table 12: Difference between the pretest and post-test level of knowledge regarding hypertension among GNM 1st year students in experimental group.

	Paired Differences					T value	df	Sig. (2- tailed) (P) Value
	Mean	SD	Std. Error Mean	95% Confidence Interval of differences				
				Lower	Upper			
Pair- 1 Pre-test	13.31	4.001	0.516	14.32	12.30	2.00	60	0.250
Post-test	19.66	4.17	0.538	20.71	18.61	2.00	60	0.250

Hypothesis 2: There will be significant association between the selected demographic variables and post-test knowledge scores of GNM 1st year students. Regarding hypertension.

Table 13: Association between pretest level of knowledge regarding hypertension among GNM 1st year students with their selected demographic variables.

ASSOCIATION BETWEEN PRETEST LEVEL OF KNOWLEDGE WITH THEIR SELECTED DEMOGRAPHIC VARIABLES

Variables		Level of knowledge						Chi Square	df	Sig
		Inadequate		Moderate		Adequate				
		f	%	F	%	F	%			
Age in years	17- 19	6	10	24	40	0.00	0.00	3.6083	2	5.99 NS
	20-22	6	10	16	26.6	2	3.3			
	23-24	1	1.6	5	8.3	0.00	0.00			
Gender	Male	1	1.6	3	5	0.00	0.00	0.1499	1	3.84 NS
	Female	12	20	42	70	2	3.3			
Area of Residence	Urban	7	11.6	23	38.3	2	3.3	2.6454	2	5.99 NS
	Rural	5	8.3	14	23.3	0.00	0.00			
	Semi urban	1	1.6	8	13.3	0.00	0.00			
Type of Family	Joint	3	5	23	38.3	2	3.3	5.5468	1	3.84 S
	Nuclear	10	16.6	22	36.6	0.00	0.00			
Marital Status	Married	2	3.3	6	10	0.00	0.00	0.3544	3	7.82 NS
	Unmarried	11	18.3	39	65	2	3.3			
	Divorce	0.00	0.00	0.00	0.00	0.00	0.00			
	Widow	0.00	0.00	0.00	0.00	0.00	0.00			
Previous exposure of knowledge regarding Hypertension	Yes	10	16.6	39	65	1	1.6	1.3446	1	3.84 NS
	No	3	5	6	10	1	1.6			
Family history of Hypertension	Yes	13	21.6	29	48.3	2	3.3	7.2771	1	3.84 S
	No	0.0	0.00	16	26.6	0.00	0.00			
Source of knowledge	Newspaper	2	3.3	8	13.3	0.00	0.00	5.1507	3	7.82 NS
	T.V.	6	10	9	15	1	1.6			
	Internet	5	8.3	24	40	1	1.6			
	Educational Program	0.00	0.00	4	6.6	0.00	0.00			

Table-13 reveals that, there was association between pretest level of knowledge regarding Hypertension with their demographic variables such as type of family χ^2 -5.5468 (dF-1) and P value is 3.84 and family history of hypertension χ^2 - 7.2771 (dF-1) and P value is 3.84.

There was no association between pre-test level of knowledge regarding Hypertension with their demographical variables such as age in years χ^2 - 3.6083 (dF-2) and P value is 5.99, gender χ^2 - 0.1499 (dF-1) and P value is 3.84, area of residence χ^2 - 2.6454 (dF-2) and P value is 5.99, marital status χ^2 - 0.3544 (dF-3) and P value is 7.82, previous exposure of knowledge regarding hypertension χ^2 - 1.3446 (dF-1) and P value is 3.84, source of knowledge χ^2 - 5.1507 (dF-3) and P value is 7.82.

FINDINGS AND DISCUSSION

The study was focused to assess the effectiveness of structured teaching program on knowledge regarding Hypertension among GNM1st year students at Hind school and College of Nursing, Safedabad, Barabanki, U.P. The study findings are discussed with regard to the objectives, Framework and hypothesis.

There was association between pretest level of knowledge regarding hypertension with their demographic variables such as type of family χ^2 - 5.5468 (dF-1) and P value is 3.84 and family history of hypertension χ^2 - 7.2771 (dF-1) and P value is 3.84.

There was no association between pretest level of knowledge regarding hypertension with their demographical variables such as age in years χ^2 - 3.6083 (dF-2) and P value is 5.99, gender χ^2 - 0.1499 (dF-1) and P value is 3.84, area of residence χ^2 - 2.6454 (dF-2) and P value is 5.99, marital status χ^2 - 0.3544 (dF-3) and P value is 7.82, previous exposure of knowledge regarding hypertension χ^2 - 1.3446 (dF-1) and P value is 3.84, source of knowledge χ^2 - 5.1507 (dF-3) and P value is 7.82.

CONCLUSION

The study finding proved that, GNM1st year students who received structured teaching program regarding hypertension had a significant improvement in their knowledge level regarding hypertension. There was association between pretest level of knowledge regarding hypertension with their demographic variables such as type of family and family history of hypertension.

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Conflict of interest

The authors certify that they have no involvement in any organization or entity with any financial or non-

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