

# ASSESS THE KNOWLEDGE OF STUDENTS REGARDING CARE OF HYPERTENSION PATIENTS: DESCRIPTIVE CROSS-SECTIONAL STUDY

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## Introduction

Hypertension is an overwhelming global challenge. Appropriate lifestyle modifications are the cornerstone for the prevention and control of hypertension. In this regard, lack of knowledge and poor attitude toward lifestyle modification have been a major setback. The causes of cardiovascular diseases are diverse but atherosclerosis and/or hypertension are the most common. Additionally, with aging a number of physiological and morphological changes occur that alter cardiovascular function and lead to subsequently increased risk of cardiovascular disease, even in healthy asymptomatic individuals

**Objective:** To assess the knowledge of students regarding care of hypertension patients.

**Methods:** .The study was conducted in selected hospitals by two data collectors and selected hospitals. The questionnaire were checked for completeness, cleaned manually and entered in to Epi- Data version 4.2. Then the data was transferred in to SPSS version 21.0 for further analysis. Descriptive statistics were carried out. Finally checked association between dependent and independent variables.

**Result:** showed that majority of nursing students 56.6% were average knowledge regarding care of hypertension patients, 26.6% were poor knowledge regarding care of hypertension patients and 6.7% were having good care of hypertension patients. Education status of students significant with p value less than 0.05 level of significant.

## Conclusion

In general, care of critical ill patients is average, necessitating the intervention of various responsible bodies. Providing properly knowledge among nursing students regarding care of hypertension patients

*Keywords: Knowledge, Hypertension, students*

## **Introduction:**

Hypertension is the most common non-communicable disease and the leading cause of cardiovascular disease in the world and many people with hypertension are unaware of their condition making treatment infrequent and inadequate. In terms of economic burden, poorly controlled blood pressure is a considerable important public health concern among older adult in the world. It has been proven that lifestyle modifications are capable of lowering hypertension.<sup>2</sup> Despite this fact, it's been documented in several studies that most hypertensive patients don't have enough knowledge about lifestyle modification. In a study carried out in South-East Nigeria, it was revealed that about 87.10% of the participants were not aware of weight reduction, regular exercise, fruit intake, cigarette smoking, and alcohol moderation as lifestyle modification therapy.<sup>3</sup> Knowledge and practice of lifestyle modification among patients with high blood pressure has however been showed to be inadequate in some studies. In 2016, postulated that having a partial knowledge and awareness alone will not lead to a change in health behaviors and practical application of knowledge. On the contrary to that, in UK, revealed that many hypertensive patients are unwilling to accept that their lifestyle practices and suggest that health education about hypertension, its consequences and lifestyle modification must be considered.<sup>4</sup> Therefore, this study aims to find out the effect of training programme on knowledge and practice of lifestyle modification among hypertensive patient

The cardiovascular system is responsible for delivery of blood, which carries oxygen and other nutrients to the tissues of the body. Cardiovascular disease is the leading cause of deaths worldwide, though since the 1970s, cardiovascular mortality rates have declined in many high-income countries. At the same time, cardiovascular deaths and disease have increased at a fast rate in low and middle-income countries. It currently causes 17.9 million deaths every year. World Heart Day 2022: The number of deaths due to heart attacks in India has remained consistently over 25,000 in the last four years, and over 28,000 in the last three year.<sup>5</sup>

The causes of cardiovascular diseases are diverse but atherosclerosis and/or hypertension are the most common. Additionally, with aging a number of physiological and morphological

changes occur that alter cardiovascular function and lead to subsequently increased risk of cardiovascular disease, even in healthy asymptomatic individuals.<sup>6</sup>

Hypertension can be prevented doing so is far less costly, and far safer for patients, than interventions like cardiac bypass surgery and dialysis that may be needed when hypertension is missed and goes untreated. They need to know that raised blood pressure and other risk factors such as diabetes often appear together. To raise this kind of awareness, countries need systems and services in place to promote universal health coverage and support healthy lifestyles: eating a balanced diet, reducing salt intake, avoiding harmful use of alcohol, getting regular exercise and shunning tobacco.<sup>7</sup>

## **Methodology**

### **Study area and period**

Study was conducted selected hospitals and study period one month.

### **Study design**

A Institutional based cross sectional study was conducted to attain the objectives of the study.

### **Population**

**Source and study population::** All nursing students attending hospitals and care to hypertension patients.

### **Inclusion criteria and Exclusion criteria**

#### **Inclusion criteria:**

- All Nursing students who are working at selected hospitals.
- Nursing students who are working at critical care ward

#### **Exclusion criteria:**

- Those students who are absent during data collection period

**Sample size:** Convenient sampling technique selected 50 Nursing students

### **Variables**

**Dependent variable:** Care of hypertension patients

### **Independent variables:**

Age, Sex, Religion, education, Previous information about hypertension

### **Operational definition**

**Assess:** In this study it refers to evaluating the level of the knowledge regarding lifestyle modification among hypertensive patients.

**Knowledge:** It refers to awareness and familiarity about care for hypertensive patients which is measured by self structured questionnaire.

**Hypertensive patients:** Patient having systolic blood pressure (SBP) of 140 mm Hg or more, or a diastolic blood pressure (DBP) of 90 mm Hg or more.

### Data quality control

The data collection questionnaires were pretested on 5% of the sample size one week before the actual data collection date and will be reviewed in areas other than the study area. Following the pretest, the tools will be edited and changed to meet the study's objectives. The consistency of the data was monitored during the collection process by closely monitoring the data collectors and the collection method, as well as reviewing the collected data on a regular basis. Any items missing from the questionnaire that the data collectors misunderstood were immediately checked by the supervisors and corrected for the next day of data collection with the principal investigators.

### Data processing and analysis

The collected data was washed, coded, and entered into the SPSS program before the actual study began. The data will be entered and analyzed using the statistical kit for social sciences (SPSS) version 20; the findings will be presented in a detailed description using frequencies, proportions, and cross tabs. Association between dependent and independent variables with a P-value less than 0.05 were considered statistically significant.

### Result

**Table 1: Frequency and percentage distribution of the demographic variables of hypertension patients**

**N=50**

Demographic variables		frequency	Percentage (%)
Age in years	18-19	14	28.0
	20-21	21	42.0
	22-23	8	16.0
	Above 25	7	14.0
Gender	Male	28	56

	Female	22	44
Religion	Hindu	27	54.0
	Christian	10	20.0
	Muslim	13	26.0
Educational status	Diploma	16	32.0
	B.Sc	7	14.0
	P.B.Bsc	8	16.0
Previous information about hypertension	no	22	44.0
	yes	28	56.0

**Table -1.** Reveals frequency and Percentage distribution of patients according their socio-demographic data. Result shows that majority of patients 21(42%) were between 41-50 years and 14(28%) of patients were found between the age group 31-40, and others 8(16%) between 51-60 years and 7(14%) were age group above 61 years. With references to gender majority of the patients 28(56%) were male and 22(44%) were female. According to religion maximum numbers of patients 27(54%) were having Hindu, only 13(26%) were Muslim and 10(20%) of patients were Christians. With regarding information majority of patients 21(42%) were doing exercise daily, 11(22%) were smoking, 10(20%) were diet and 8(16%) were drinking alcohol.

**Table:2: Knowledge of students regarding care of Hypertension patients**

Characteristics	Mental wellbeing score	
	F	Percentage
Poor Knowledge	16	32%
Average Knowledge	24	48%
Good Knowledge	10	20%

According to Table 2, 10 (20%) Students had good knowledge, 16 (32%) had Poor Knowledge, and 24 (48%) had average Knowledge.

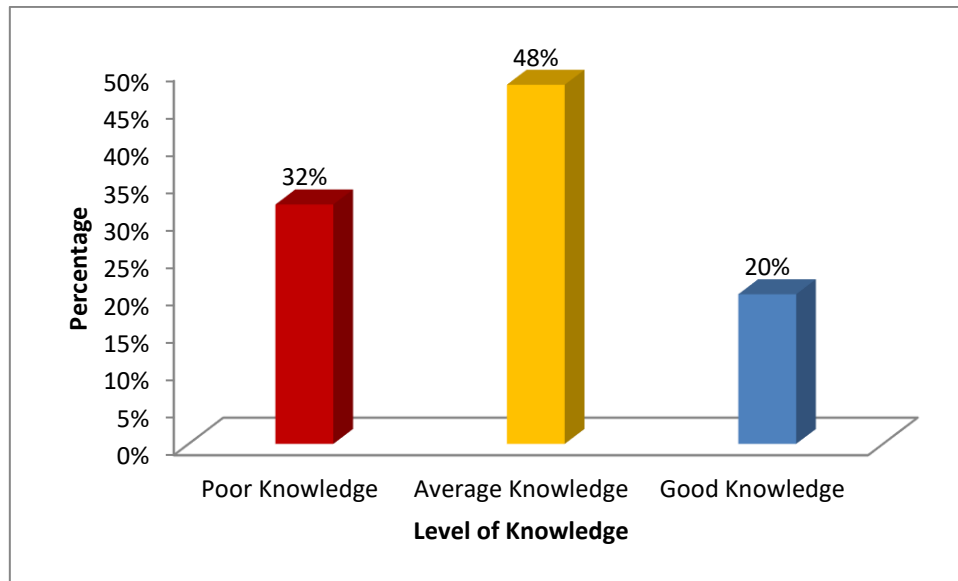


Fig.1: Knowledge of students regarding care of Hypertension patients

**Section: III- Association between pretest levels of knowledge regarding hypertension among nursing students and demographic profile or characteristics**

n=50

variables		Knowledge level			Total	Chi square df	P value
		Poor	Average	Good			
Age (In Year)	18-19	9	5	0	14	8.575 2	0.199 NS
	20-21	14	6	0	20		
	22-23	4	5	0	9		
	Above 25	2	5	0	7		
Gender	Male	13	9	0	22	5.023 1	0.285 NS
	Female	16	12	0	28		
Religion	Hindu	12	16	0	28	0.584 2	0.178 NS
	Muslim	6	4	0	10		
	Christian	11	1	0	12		
Educational status	Diploma	6	8	0	14	1.714 3	0.003 *S
	B.Sc	5	4	0	9		
	P.B.Bsc	4	4	0	8		

Previous information about hypertension	Yes	17	12	0	29	2.280	0.355
	No			0	21	3	NS
Information regarding prevention of hypertension	Exercise	13	9	0	22	0.1558	0.979
	Diet	6	3	0	9	3	NS
	Smoking	5	6	0	11		
	Alcohol	5	3	0	8		

\*p<0.05 indicates significant association, NS- Not- significant.

The table 3 showed that demographic variable educational status of patients had statistically significant association with the pretest levels of knowledge regarding care among hypertension patients. Age, Gender, religion, marital status, occupation, type of family, family monthly income, Previous information about hypertension and what information regarding had shown no statistically significant association with the pretest levels of knowledge regarding care among hypertension patients. P<0.05.

**Conclusion:** Nursing students required proper knowledge to provide care to hypertension patients and holistic care to patients early recover from Hypertension.

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