



**International Journal of Biology, Pharmacy
and Allied Sciences (IJBPAS)**
'A Bridge Between Laboratory and Reader'

www.ijbpas.com

**EFFECTIVENESS OF PLANNED TEACHING PROGRAMME ON
KNOWLEDGE AND PRACTICE REGARDING MANAGEMENT
OF HYPERTENSION AMONG THE EMPLOYEES OF IT COMPANIES
FROM GUJARAT STATE**

PATEL S¹* AND DABHI RH²

- 1: Assistant professor, Department of Medical Surgical Nursing, Sumandeep Nursing College, Sumandeep Vidyapeeth an institution deemed to be University, Vadodara, Gujarat
- 2: Post Graduate Nursing Student, Sumandeep Nursing College, Sumandeep Vidyapeeth an institution deemed to be University, Vadodara, Gujarat

*Corresponding Author: Ms. Sonal Patel: E Mail: Sonalpatel6409@gmail.com

Received 15th July 2023; Revised 19th Aug. 2023; Accepted 22nd Nov. 2023; Available online 15th Dec. 2023

<https://doi.org/10.31032/IJBPAS/2023/12.12.1035>

ABSTRACT

Background of the study: This study shows that how Hypertension affects the life of the individuals especially the IT employees who have a sedentary lifestyle. This also shows that any people suffering with Hypertension shows results that they know how to take care of themselves by measuring the Hypertension regularly and taking care of their health by medications. There are different ways to balance the blood pressure and that is by changing their life style in their daily life. Mainly diet plays a vital role in maintaining blood pressure in addition to that exercise also plays a role in maintaining blood pressure. In this pretest and posttest was taken and had found the significant and non significant values. **Aim:** The main aim of the study is to find out the Knowledge and Practice regarding management of Hypertension among the employees of selected IT companies. **Material and methods:** A pre experimental study was conducted in finding the Knowledge and Practice regarding management of Hypertension among the employees of selected IT companies. This study consists of total 113 hypertensive employees, data was were collected from the IT companies of Vadodara and the samples were the known cases of Hypertension. Knowledge level and Practice checklist was given to know the Knowledge level of the patient. Here a Knowledge questionnaire regarding Hypertension was prepared for the employees and a Practice checklist was given which contained statements of how they were taking care of themselves. Here non randomized consecutive

sampling had been used as the sampling technique. The statistical test of the Knowledge and Practice was found, the descriptive inferential statistics was used. The inferential statistics used here were the T test and chi square test to find out the association between the Knowledge level of the employees.

Result: In regard to the Knowledge question it was found that out of 113 samples I had done pre test and post test and had significantly compared these values and found out that the pre test level of knowledge has the values of 2(1.8%) are having good Knowledge regarding management of Hypertension, 2(1.8%) have average Knowledge regarding knowledge of Hypertension, 109(96.5%) are poor knowledge regarding Hypertension. After the intervention the employees had improved their knowledge and the values are 92(81.4%), have good knowledge, 17(15%) have an average knowledge, 4(3.5%) has poor knowledge regarding hypertension. According to the practice level too the pretest and post test was done and found out that after the intervention the employees had improved their efficiency in practice level and out of 113 samples in the pre test the employees has an average knowledge regarding how to manage the hypertension. The pre test results were 5(4.4%) had good practice habits, 21(18.6%) has an average level of practice habits and 87(77%) had good practicing habits. After the intervention there had been changes in their lifestyles and the results were effective. After the intervention the results showed that 48 (42.5%) had good knowledge on how to maintain their hypertension, 56(49.6%) had an average level while 8(7.1) had poor knowledge on how to maintain their hypertension. After that the pre test and the post test was compared to find out the significance of both and found that it had been effective as their t value was higher than that of table value, the t value was 15.664 while the table value was 1.660. Therefore, both the knowledge and practice level had been effective in study. **Conclusion:** In a nutshell, the study concluded that the planned teaching program regarding Hypertension was useful and effective for them to manage their lives to maintain their blood pressure.

Keywords: Hypertension, IT employees, management of Hypertension

INTRODUCTION

Hypertension can lead to many problems like metabolic syndrome and it can get complicated if it is not treated properly. Hypertension is also called as “High blood pressure”. The metabolic syndrome is not maintained or balanced properly. There should be changes in their lifestyle modifications if they suffer with Hypertension [1-3]. Hypertension represents systolic and diastolic, the systolic pressure is the pressure when the blood vessels of the heart

contracts and the diastolic pressure is the pressure in the blood vessels when the heart rests. Hypertension mostly occurs above 60 years of age [4]. Hypertension is categorized as primary Hypertension and secondary Hypertension. Most of the people suffer with primary Hypertension which is related to age and genetic factors [5-8]. Some people develop some of the symptoms like headaches, shortness of breath or nose bleeds in Hypertension but these aren't specific. The

ranges of Hypertension are, Normal –less than 120/ 80, elevated - less than 120-129/less than 80, The stages of Hypertension may be classified as; STAGE1 Hypertension – 130-139, STAGE 2 -140 and above /90 and above. The that can cause Hypertension and some of the risk factor includes the modifiable risk factors and non – modifiable risk factor of Hypertension; therefore, the modifiable riskfactor includes unhealthy diets, physical inactivity, consumption of tobacco and alcohol, too much salt in the food, stress, older age, sleep apneaeight and obese. Non-modifiable risk factors include a family history of Hypertension, age over 65, and co-existing disease like diabetes, kidney disease, and heart diseases [9, 10]. Vital role of Hypertension is mainly due to age and race, it mostly affects men than women. A secondary Hypertension is called as a secondary Hypertension when direct cause can be found. It can be caused by the conditions that affect the internal organs like heart, kidney and endocrine system. Smokers, pregnant women, women who take birth control pills are most likely to develop Hypertension. The incidence rate of Hypertension in the year 2019 is 1.13 billion.

METHODOLOGY

Research approach and Design:

This study employs a Quantitative research approach to determine the regarding management of hypertension among the employees of it companies from Gujarat

state”

Research design

In this research study the design used here is the Pre experimental research design

One group →Pre test→ Experiment →Post testO1→×→o2

RESEARCH SETTING:

Study was conducted at specific IT companies of Vadodara.

Source of data:

The samples used here were the employees working in IT companies of Vadodara. The companies taken for the study was the Bit info tech company and social media management company

Population:

Employees working in IT companies of Vadodara who have Hypertension has been selected as the population here.

Sampling technique:

Samples were identified by Non randomized consecutive method

Sample selection criteria:

Inclusion criteria:

1. Employees who have been suffering with Hypertension
2. The employees who are present at the time of data collection.
3. The employees who are willing to participate in the study.

Exclusion criteria:

1. The employees who are not able to give answers due to various situations

2. Those who are not willing to participate in the study
3. Those who do not have Hypertension.

DESCRIPTION OF TOOLS:

This consists of following sections:

SECTION 1:

DEMOGRAPHIC DATA:

The demographic variables consist of age, gender, socio-economic status of the family (qualification, occupation, income), life style modifications, diet, marital status

SECTION 2:

KNOWLEDGE QUESTIONNAIRE:

In this section Knowledge questionnaire was used to determine the employee decisions or responds regarding Hypertension.

Step 1: In this study the procedure of Hypertension had been carried out among the employees.

Step 2: Then there was questionnaire that was distributed among the participants to determine the Knowledge of the employees regarding Hypertension. They were categorized as Good, average and poor.

SECTION 3:

CHECLIST ASSESSMENT:

This deals with the Practice checklist assessment to determine the Practice of Hypertension regarding management of Hypertension.

VARIABLES:

Independent variables:

Planned teaching program regarding

management of Hypertension

Dependent variables:

Level of Knowledge and Practice regarding management of Hypertension

TOOL CONSTRUCTION:

The data collection procedure was carried for a period of 1 week. The study was conducted after obtaining permission from the concerned authorities and with informed consent from the samples. The data was collected by multiple choice questions and checklist

The following steps are adopted in the development of the tools

Tool1: demographic variables:

The demographic variables have age, gender, socio-economic status of the family (qualification, occupation, income), life style modifications, diet, marital status

Tool 2: multiple choice questions

It comprises on items regarding Knowledge questionnaire to identify the level of Knowledge on Hypertension its and its management.

Tool: 3 checklist:

The Practice checklist had some few questions regarding how one manage their life if they had Hypertension and how they Practice in their day to day life.

Analysis & Interpretation:

Section I: the sociodemographic data of the IT employees:

Table 2, depicts that the effectiveness of the level of Knowledge of the employees has been improved as the t value has been

calculated (32.135) is higher than the table value (1.660) at 0.05 level. Therefore it is significant. The hypothesis H3 is accepted.

SECTION III: CHECKLIST OF PRACTICE ASSESSMENT (PRE TEST AND POST TEST)

Table 4, depicts that the effectiveness of the

Practice assessment regarding management of Hypertension among the employees has been improved as the t value has been calculated (15.664) is higher than the table value (1.660) at 0.05 level. Therefore it is significant. Therefore the hypothesis H4 is accepted.

Table 1: Sociodemographic data of the IT employees

DEMOGRAPHIC VARIABLES		
CHARACTERISTICS :	FREQUENCY	PERCENTAGE
AGE :		
20-25 Years	20	17.7%
26-30 Years	47	41.6%
31-35 Years	35	31.0%
Above 40 Years	11	9.7%
EDUCATIONAL QUALIFICATION		
Secondary Education	2	1.8%
Diploma	18	15.9%
Graduate	18	15.9%
post graduate	75	66.4%
MARITAL STATUS		
Married	62	54.9%
Single	40	35.4%
Divorced	7	6.2%
Widower	4	3.5%
OCCUPATION		
Housewife	6	5.3%
Labour	13	11.5%
Services	52	46.0%
Others	42	37.2%
HOUSEHOLD INCOME		
Top 10 %	9	8.0%
11 - 20%	33	29.2%
21-30%	41	36.3%
31-40%	30	26.5%

Table 2: Knowledge regarding management of hypertension among IT employees (pre test and posttest)

KNOWLEDGE QUESTIONNAIRE (PRE TEST)					
CHARACTERISTICS:		FREQUENCY		PERCENTAGE	
Good		2		1.8%	
Average		2		1.8%	
Poor		109		96.5%	
Total		113		100%	
KNOWLEDGE QUESTIONNAIRE (POST TEST)					
Good		92		81.4%	
Average		17		15%	
Poor		4		3.5%	
Total		113		100%	
Level of Knowledge	Mean	T	Df	Table	Significant
Pre test	2.95	32.135	112	1.660	Significant P>0.05
Post test	1.22				

Table 3: Checklist of Practice Assessment (Pre Test and Post Test)

PRACTICE ASSESSMENT (PRE TEST)		
CHARACTERISTICS	FREQUENCY	PERCENTAGE
Good	5	4.4%
Average	21	18.6%
Poor	87	77%
Total	113	100%
PRACTICE ASSESSMENT (POST TEST)		
Good	48	42.5%
Average	56	49.6%
Poor	8	7.1%
Total	113	100%

Table 4: Association Between the Pretest and Post Test Knowledge Among the IT Employee

Level of Knowledge	Mean	T	Df	Table	Significant
Pre test	2.73	15.664	112	1.660	Significant
Post test	1.64				

SUMMARY:

A pre experimental study was conducted in finding the Knowledge and Practice regarding management of Hypertension among the employees of selected IT companies. This study consists of total 113 hypertensive employees. In regard to the Knowledge question it was found that out of 113 samples I had done pre test and post test and had significantly compared these values and found out that the pre test level of knowledge has the values of 2(1.8%) are having good Knowledge regarding management of Hypertension, 2(1.8%) have average Knowledge regarding knowledge of Hypertension, 109(96.5%) are poor knowledge regarding Hypertension. After the intervention the employees had improved their knowledge and the values are 92(81.4%), have good knowledge, 17(15%) have an average knowledge, 4(3.5%) has poor knowledge regarding

hypertension. Then the comparison was done between the pre test knowledge level and post knowledge level and found out that it is significant as the t value is higher than the table value that is t value is 32.135 and the table value is (1.660) at 0.05 level Therefore the employees have good Knowledge regarding how to prevent and manage the Hypertension on this swamped life. Here a checklist assessment was also done and found out that the employees really followed the protocols of the Hypertension management either with the help of the doctor or by themselves and found that out of 113 samples many of them have showed positive result of managing and preventing of Hypertension. According to the practice level too the pretest and post test was done and found out that after the intervention the employees had improved their efficiency in practice level and out of 113 samples in the pre test the

employees has an average knowledge regarding how to manage the hypertension. The pre test results were 5(4.4%) had good practice habits, 21(18.6%) has an average level of practice habits and 87(77%) had good practicing habits. After the intervention there had been changes in their lifestyles and the results were effective. After the intervention the results showed that 48(42.5%) had good knowledge on how to maintain their hypertension, 56(49.6%) had an average level while 8(7.1) had poor knowledge on how to maintain their hypertension. After that the pre test and the post test was compared to find out the significance of both and found that it had been effective as their t value was higher than that of table value, the t value was 15.664 while the table value was 1.660.

CONCLUSION:

The findings from the study revealed that all the 113 samples did not have good knowledge regarding hypertension although they practiced and assessed their hypertension regularly. But the planned teaching provided to them regarding knowledge of hypertension had been helpful to them. After the intervention the employees had improved their knowledge and the values are 92(81.4%), have good knowledge, 17(15%) have an average knowledge, 4(3.5%) has poor knowledge

regarding hypertension. After the provision of an insight knowledge regarding hypertension the employees showed drastic changes in their daily life to improve their health conditions. A checklist had also been used to determine how effective their routine is in regard to their condition. After the intervention the results showed that 48(42.5%) had good knowledge on how to maintain their hypertension, 56(49.6%) had an average level while 8(7.1) had poor knowledge on how to maintain their hypertension

REFERENCES:

- [1] Nandhini S. Essential Hypertension-a review article. Journal of Pharmaceutical Sciences and Research. 2014 Sep 1;6(9):305
- [2] KROEKER EJ, WOOD EH. Comparison of simultaneously recorded central and peripheral arterial pressure pulses during rest, exercise and tilted position in man. Circulation research. 1955 Nov;3(6):623- 3
- [3] Amery A, Brixko P, Clement D, De Schaepdryver A, Fagard R, Forte J, Henry JF, Leonetti G, O'Malley K, Strasser T, Birkenhäger W. Mortality and morbidity results from the European Working Party on High Blood Pressure in the Elderly trial. The Lancet. 1985 Jun 15;325(8442):1349-54.

- [4] Mansour AI, Abu-Naser SS. Diagnosis of High Blood Pressure Diseases Expert System. *Cardiology Hypertension*. 2020 Sep 1;6:100044.
- [5] Deoke A, Deoke S, Saoji A, Hajare S. Profile of modifiable and non-modifiable risk factors in stroke in a rural based tertiary care hospital—a case control study. *Global journal of health science*. 2012 May;4(3):158.
- [6] Sang CN, Whelton PK, Hamper UM, Connolly M, Kadir S, White RI, Sanders R, Liang KY, Bias W. Etiologic factors in renovascular fibromuscular dysplasia. A case-control study. *Hypertension*. 1989 Nov;14(5):472-9.
- [7] Ibrahim MM, Damasceno A. Hypertension in developing countries. *The Lancet*. 2012 Aug 11;380(9841):611-9.
- [8] Agarwal R, Flynn J, Pogue V, Rahman M, Reisin E, Weir MR. Assessment and management of Hypertension in patients on dialysis. *Journal of the American Society of Nephrology*. 2014 Aug 1;25(8):1630-46.
- [9] Chobufo MD, Gayam V, Soluny J, Rahman EU, Enoru S, Foryoung JB, Agbor VN, Dufresne A, Nfor T. Prevalence and control rates of Hypertension in the USA: 2017–2018. *International Journal of*
- [10] Weiss NS. Relation of high blood pressure to headache, epistaxis, and selected other symptoms: The United States Health Examination Survey of Adults. *New England Journal of Medicine*. 1972 Sep 28;287(13):631-3.