



**International Journal of Biology, Pharmacy
and Allied Sciences (IJBPAS)**

'A Bridge Between Laboratory and Reader'

www.ijbpas.com

KNOWLEDGE ON HYPERTENSION AMONG GERIATRIC PATIENTS AT SRM GENERAL HOSPITAL, KATTANKULATHUR, INDIA

SUSEELAL T^{1*} AND CHANDRALEKA R²

1: Associate Professor College of Nursing, SRM Institute of Science and Technology, Kattankulathur,
Kancheepuram district, India

2: B. Sc. (N), College of Nursing SRM Institute of Science and Technology, Kattankulathur,
Kancheepuram district, India

*Corresponding Author: Dr. T.Suseelal; E Mail: suseelal.john@gmail.com

Received 10th Dec. 2024; Revised 25th Dec. 2024; Accepted 28th Jan. 2025; Available online 15th March 2025

<https://doi.org/10.31032/IJBPAS/2025/14.3.1035>

ABSTRACT

Hypertension is a non communicable disease affecting most of the adult population. It is a long term medical condition in which the blood pressure in the arteries is persistently elevated. Many patients end with complications if they failed to take regular treatment. The study aims to assess the knowledge on hypertension among Geriatric patients and to associate the knowledge on hypertension among Geriatric patients with their demographic variables. at SRM General Hospital, Kattankulathur. Non experimental descriptive research design was adopted to assess the knowledge on hypertension among Geriatric patients. 100 participants were selected by non probability convenient sampling technique. Face to face interview questionnaire was used to assess the knowledge on hypertension among Geriatric patients at SRM General Hospital, kattankulathur. **The result** revealed majority of the patients 70% had moderate knowledge, 17% of them had high knowledge, 13% of them had poor knowledge. There is no significant association between the demographic variables and level of knowledge about hypertension with age, gender, marital status, education, occupation, place of living, health insurance status, duration of illness, family history of chronic diseases, type of chronic disease and visual acuity. The study concludes that there is a need for health education among geriatric patients to control hypertension, to lead a quality life and to prevent morbidity and mortality.

Keywords: Knowledge, Hypertension, Geriatric patients, Health education, Morbidity

INTRODUCTION:

Hypertension scenario is uncontrollable due to stressful mechanical life. Also heredity plays a major role. Globally almost 90% of the people are affected with hypertension. It is closely related to behavior and lifestyle modification. Systolic blood pressure 140 and diastolic blood pressure more than 90 mm of Hg is considered as high blood pressure [1]. Hypertension is prevented by changing unhealthy behaviors and lifestyle [2]. Hypertension is high among old people because they do not have adequate knowledge about the disease and its management [3]. Some of the patients they stop their medication in their own. Their life ended with stroke and death. It became a burden to the family members since they spend many lakhs of rupees for treatment at end stage of life. It affects both gender, race, and people with all economic status. Studies reveals almost 125 million people are affected with chronic disease among adult population [4]. One of the study stated that around 31.6% of the patients were aware of high blood pressure, only 28.8% of the participants had taken their medication and nearly 1.2% of the patients followed good lifestyle practice. Overall blood pressure control was less than 140/90 mm of Hg [5].

To promote behaviors, knowledge and health tips must be improved among all age group. The knowledge of the patients with hypertension was associated with control of the blood pressure and regular medication. The complication of the hypertension lead to 51% of stroke, 45% of ischemic heart disease and 16% mortality due to stroke [6, 7]. According to WHO high blood pressure, high blood glucose, high cholesterol, Lack of physical activity and poor intake of fruits and vegetables leads to cardio vascular disease [8]. Around 19% of global death is caused by heart disease [9].

WHO estimates that, 7.5 million deaths in 2012 due to hypertension. One of the study mentioned 90% of the health education is done by community health workers in china [10]. In 2008, it is estimated that 1 billion people were affected, 12.5 million people suffer from hypertension in UK, 29.8% people suffer from hypertension, in India. In Tamil Nadu 21.4% people were affected and in Chennai 20% people are affected with hypertension [11].

MATERIALS AND METHODS

This study used non experimental descriptive research design. It was conducted among geriatric patients those who are admitted and came to medical out-patient department in

SRM General Hospital, kattankulathur. Participants were explained about the importance of the study. The Patients those who are admitted and those who came to medical out-patient department in SRM General Hospital were included. The sample size consisted of 100 patients above 50 years.

DATA COLLECTION TOOL

Data on demographic variables which includes age, gender, marital status, education, occupation, place of living, health insurance status, duration of illness, family history of chronic diseases, if yes: types of chronic illness, visual acuity were collected. Face to face structured interview questionnaire which consist of 25 items was used to assess the knowledge on hypertension among geriatric patients. The questions were framed on domains like causes, signs and symptoms, diagnosis, diet pattern, treatment, exercise, complications and health education. Each correct answer carries score (1). Wrong answer carries score (0). Total score:25. The Reliability of the tool was established by split half method. The coefficient correlation $r = 0.9$ which is greater than $r = 0.05$ which was very high. Hence, the tool was considered reliable and feasible for proceeding with the main study. After the approval from experts in nursing, statistician, Institutional Ethical

committee clearance was obtained prior to data collection. Written consent was obtained from the participants. The participants were explained about the need for the study and with their consent face to face structured interview questions were asked by the researcher. Confidentiality was maintained throughout the data collection procedure.

Statistical Analysis

The Collected raw data was entered in to the master coding sheet and saved in Excel and analysed by using statistical package SPSS version (16.0) with descriptive and inferential statistical method. The statistical significance used was p value < 0.05 .

RESULTS

The result of the study revealed that 13% of the participant had poor knowledge, 70% of the patient had moderate knowledge, and 17% of them had high knowledge on hypertension (**Table 1, Figure 1**).

From **Table 2** only duration of illness is having association with demographic variables with the p -value < 0.05 . All other variables are not significant since all the p values are greater than (0.05). Hence, there is no significant association between the other demographic variables and knowledge on hypertension with the geriatric patient.

Table1: Assessment of the level of knowledge on Hypertension among Geriatric patients at SRM General Hospital (n=100)

S. No.	Level of knowledge on hypertension	No of patients	Percentage
1	Poor Level of Knowledge	13	13%
2	Moderate Level of Knowledge	70	70%
3	High Level of Knowledge	17	17%

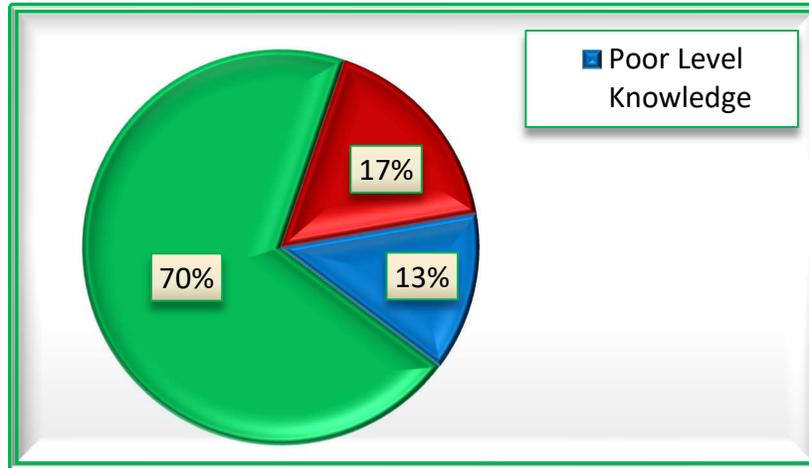


Figure 1: Percentage distribution of level of knowledge on hypertension

Table 2: Association between knowledge on Hypertension among geriatric patients and with their demographic variables (n= 100)

S. No.	Demographic Variables	Class	Level of Knowledge on Hypertension			Chi-Square	DF	P-Value
			Poor Level Knowledge	Moderate Level Knowledge	High Level Knowledge			
1	Age	50-60 Years	9	35	7	2.729	4	0.604
		61-70 Years	3	22	7			
		71 Years and above	1	13	3			
2	Gender	Male	6	36	8	0.193	2	0.908
		Female	7	34	9			
3	Marital Status	Married	5	41	12	3.153	2	0.207
		Divorced/Widow(er)	8	29	5			
4	Education	Informal	7	45	12	6.485	8	0.593
		Middle School	5	10	3			
		High School	1	6	1			
		Higher secondary	0	3	0			
		Graduated	0	6	1			
5	Occupation	Private Employed	3	21	3	1.176	2	0.556
		Unemployed	10	49	14			
6	Place of Living	Urban	5	38	11	2.050	2	0.359
		Rural	8	32	6			
7	Health Insurance Status	Atleast One Insurance	5	23	5	0.275	2	0.872
		No Insurance	8	47	12			
8	Duration of Illness	< 1 Year	0	15	1	15.420	6	0.017*
		2 - 4 Years	0	20	5			
		4 Years - 6 Years	9	18	5			
		> 6 Years	4	17	6			
9	Family history of chronic disease	Yes	10	43	10	1.282	2	0.527
		No	3	27	7			
10		Diabetes Mellitus	4	18	4	1.683	6	0.946
		Hypertension	2	10	3			

S. No.	Demographic Variables	Class	Level of Knowledge on Hypertension			Chi-Square	DF	P-Value
			Poor Level Knowledge	Moderate Level Knowledge	High Level Knowledge			
	If yes, Type of Chronic Illness	Cancer	3	7	2			
		Others	1	8	1			
11	Visual Acuity	Normal Vision	3	19	7	3.446	4	0.486
		Myopia	5	30	8			
		Hyper Metropia	5	21	2			

Significant at p is (< 0.05)

DISCUSSION:

Hypertension is common among people who deals with public, and those who are addicted to smoking and alcohol consumption. In this current arena education and medical facilities are grown in all regions of the country. Even though people are not interested in the irregular medical check up and treatment, high blood pressure can be treated early if the patients check their blood pressure regularly, with life style practice, low cholesterol diet and regular medication.

Some of the patients often forget to take their medicine. It leads to stroke at anytime in life. Family people must take responsibility in guiding the patients with hypertension on regular medications and anti hypertensive diet. People should protect their environment from unnecessary stress. Also they should avoid high cholesterol items like cheese, egg yolk, and oily foods. High salt intakes also have adverse effect on the blood vessels. Health professionals must take initiative in maintaining normal blood pressure among the patients and prevent the diseases in all age

groups. Regular walk and recreation and sound sleep should be reinforced.

The findings of the present study is consistent with the study done by (Eshah & Al-daken, 2016) on knowledge of hypertension with 284 samples. The out come of the study revealed the mean score on knowledge of hypertension was 73.65. Knowledge on life style and complication was high and knowledge on definition and diet practice was low. Also there was significant association found with the posttest knowledge of hypertension and demographic variables. The present study revealed that only 17% of the patients had high knowledge and 70% had moderate level of knowledge. Hence interventional studies can be reinforced among the geriatric population to prevent complication of hypertension.

CONCLUSION:

The present study assessed the level of knowledge on hypertension and association between knowledge on hypertension among geriatric patients with their demographic variables. The study concludes that there is a

need for health education among geriatric patients to control hypertension, to lead a quality life and so that morbidity and mortality can be prevented all over the world.

ACKNOWLEDGEMENT:

The authors are grateful to the participants who took part in the study.

DECLARATION OF CONFLICT OF INTEREST:

The authors declare no conflict of interest.

REFERENCES:

- [1] Eshah, N.F, Al-daken, Laila I. (2016). Assessing public's knowledge about hypertension in a community-dwelling sample, 31(2): 158-165.
- [2] Zhazhan Li, YanyanLi, Lizhangchen, Pengchen, Yingyun Hu. (2015). Prevalence of depression in patients with hypertension, 94 (31).
- [3] Raghupathy A, Nanda K.K, HiraPant, Hassan K, Oscar H.F, c Emanuele D.A, Dorairaj. (2014). Systematic review and meta-analysis of prevalence, awareness, and control of hypertension, 32(6): 1170-1177.
- [4] Jinwei W, Luxia Z, Fang W, Lisheng L, Haiyan W. (2014). Prevalence, awareness, treatment, and control of hypertension in china. Results from a national survey 27(11):1355-1361.
- [5] Clara K.C, Koon K.T, Sumathy R. (2013). Prevalence, awareness, treatment, and control of hypertension in rural and urban communities in high-, middle-, and low-income countries; 310(9): 959-968.
- [6] Aysha A, Saniya S.G, Saima Lalani, Zahra A.S, Aamir H.K. (2012). Good knowledge about hypertension is linked to better control of hypertension, 5 (1): 579.
- [7] Chen JH, Zhou YY, Li SQ, Lin HY, Zhang YF. Hypertension Knowledge Survey and Health Education of Elder People with Pre-hypertension in Ronggui Community..
- [8] Wang RL, Zhang L, Ning YH. (2011). The Survey of Elders' Knowledge on Preventing and Treating the Hypertension and Diabetes in Communities of Yinchuan.
- [9] Rizwana B.S, Elsheba M, Jayadevan S, Jayakumary M, Shatha A.S, Shaikh A.B. (2011). Knowledge regarding risk factors of hypertension among entry year students of a medical university, 18(3): 124-129.
- [10] Zhou Q, Pan BY, Lin GZ, Wu XJ, Liang BH. (2010). Prevalence, Awareness, Treatment and Control of Hypertension in 15-69 Years Old Residents in Guangzhou, Chin J Prevention Control Chronic disease, 18: 587-590.

- [11] Rajeev B, Arvind Kandoria, Rajeev M, Piyush V, Bakshish S, Pravesh Dhiman, Avinash S. (2010). Prevalence, awareness and control of hypertension in rural communities of himachal Pradesh, 423-424.
- [12] Karaeren H, Yokuşoğlu M, Uzun S, Baysan O, Köz C.T (2009). The effect of the content of the knowledge on adherence to medication in hypertensive patients, 9: 183-188.
- [13] Margaret Mc Donald, Robin P. Hertz, Alan N. Unger, and Michael B. Lustik. (2009). Prevalence, awareness and management of hypertension, Dyslipidemia and diabetes among United States adults aged 65 and older; 64(2): 256-263.
- [14] V. Mohan, M. Deepa, S Farooq, M Datta, R Deepa. (2007). Prevalence, awareness and control of hypertension in Chennai-the Chennai urban rural epidemiology study.