

# A Study to Assess the Knowledge and Attitude on Lifestyle Modification among Hypertensive Patients Attending Outpatient Department at Selected Hospitals at Gwalior, M.P.

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## ABSTRACT

“A study to assess the knowledge and attitude on lifestyle modification among hypertensive patients attending outpatient department at selected hospitals at Gwalior, M.P. The aim of the study is to identify and determine the level of the knowledge and attitude of Hypertensive patients regarding Life style modification at selected Hospitals of Gwalior, M.P. The objective of the study was To assess the knowledge level of hypertensive patients on lifestyle modification, To identify the attitude of hypertensive patients towards lifestyle modification, To find out the correlation between knowledge and attitude of hypertensive patients on lifestyle modification, To find out the association between knowledge level of hypertensive patients with their selected demographic variables, To find out the association between attitude level of hypertensive patients with their selected demographic variables. The research approach adopted for this study is a descriptive approach. The research design adopted for this study was descriptive survey design to assess the knowledge and attitude of Hypertensive patients regarding life style modification in selected Hospitals at Gwalior. The investigator had utilized Non probability convenient sampling for the selection of the subjects. A sample of 60 Hypertensive patients was selected for the study. The result of this study shows that The level of knowledge of Hypertensive patients regarding Life style modification shows 16.7 % of them having poor knowledge and 65 % of them having average knowledge, 18.3% of them having good knowledge. The level of attitude of hypertensive patients on life style modification shows 13.3% of them having unsatisfactory attitude, 53.4% of them having moderately satisfactory attitude, 33.3% of them are having satisfactory attitude. The Correlation between Knowledge and Attitude of Hypertensive patients regarding Life style modification shows significant positive, moderate correlation. The researcher prediction says when knowledge increases their attitude score also increases moderately, Based on the study there was an association between the knowledge and attitude score of the Hypertensive patients with selected socio-demographic variables like age, family history of Hypertension and habits are significantly associated with their level of knowledge and sex, occupation and type of family are significantly associated with their level of attitude.

**How to cite this paper:** Hemendra Tomar | Arvind Kumar Shekhar "A Study to Assess the Knowledge and Attitude on Lifestyle Modification among Hypertensive Patients Attending Outpatient Department at Selected Hospitals at Gwalior, M.P." Published in International Journal of Trend in Scientific Research and Development (ijtsrd), ISSN: 2456-6470, Volume-8 | Issue-2, April 2024, pp.689-695, URL: [www.ijtsrd.com/papers/ijtsrd64733.pdf](http://www.ijtsrd.com/papers/ijtsrd64733.pdf)



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**KEYWORDS:** Hypertension modified life style knowledge attitude hypertensive patients

## Need for the study: -

Hypertension is an important modifiable risk factor for cardiovascular and renal disease in Western and Asian populations. It is an extremely common finding

in the community and a risk factor for myocardial infarction, stroke, congestive heart failure, end-stage renal disease, and peripheral vascular disease.

Hypertension occurs in about 10-20% of the adults in developing countries like India and developed countries like Europe.

15% will die of renal failure. Hypertension is also a “silent factor” in the etiology of many death attributed to stroke or heart attack.

Strong research evidence has conclusively illustrated that lifestyle modification are effective in lowering BP and reducing CV risk factors at little overall cost and with minimal risk. Lifestyle modifications are widely advocated to prevent high BP. They are suggested as definitive therapy for some patients, at least for the first 6-12 months after initial diagnosis.

The International Society on Hypertension and National Committee on the Prevention, Detection, Evaluation and Treatment of High Blood Pressure have recommended lifestyle changes to lower BP, enhance antihypertensive drug efficacy and reduce CV risk, therapeutic lifestyle changes include a diet modification, physical activity, weight management, limiting alcohol consumption and no tobacco use. However, evidence suggests that patients experience difficulty with incorporating these changes in their daily lives. Health care providers also have reported less knowledge regarding this aspect. So it was found out that the necessity of teaching for modifying their lifestyle.

During clinical posting, the investigator identified that most of the patients do not have sufficient knowledge about the importance of lifestyle modification in hypertension. So the investigator decided to do a study on this aspect.

#### **Objectives of the study:**

1. To assess the knowledge level of hypertensive patients on lifestyle modification.
2. To identify the attitude of hypertensive patients towards lifestyle modification.
3. To find out the correlation between knowledge and attitude of hypertensive patients on lifestyle modification.
4. To find out the association between knowledge level of hypertensive patients with their selected demographic variables.
5. To find out the association between attitude level of hypertensive patients with their selected demographic variables.

#### **Material and method:-**

**Research approach and design:** - Descriptive approach with survey design was adopted.

**Setting of the study:** - JAH and Maheshwari Hospital of Gwalior, M.P.

**Study population:** - Hypertensive patients.

**Accessible population:** - Hypertensive patients admitted at selected Hospital of Gwalior, M.P.

**Sample size:** - 60

**Sampling technique:** - Non probability convenient sampling technique.

#### **Inclusive criteria:**

1. The patients who are in the age group between 20 to 60 years.
2. The patients who are diagnosed as hypertensive.
3. The hypertensive patients who are attending outpatient department in selected hospitals, Gwalior.
4. The patients who are available during the period of data collection.
5. The patients who can read and understand English or Hindi.

#### **Exclusion criteria**

1. The patients who are not willing to participate in the study.
2. The patients who are not diagnosed as hypertensive.

#### **Variables under study**

1. **Study variable:** Knowledge and attitude on lifestyle modification among hypertensive patients.
2. **Extraneous variable:** Age, sex, education, occupation, duration of illness, family income, family type, history of hypertension in family, dietary pattern and habits of hypertensive patients.

#### **Description of Tools**

The tool used for the data collection was organized into three sections:

**Section – I:** Includes „12“ items related to the socio-demographic variables of the respondents about age of the hypertensive patients, sex, education, occupation, duration of illness, family income, family type, history of hypertension in family, dietary pattern, habits of hypertensive patients, previous information regarding Life style modification and source of Health information

**Section – II :** Includes 20 questions to assess the knowledge of hypertensive patients regarding life style modification, under 3 areas namely general information about Hypertension, management of Hypertension, information about life style modification of Hypertensive patients,

**Section – III:** Includes 10 items to assess the attitude of Hypertensive patients regarding Life style modification. This section utilized 5 point likert scale to assess the attitude in terms of Strongly agree, agree, uncertain, disagree and Strongly disagree

Out of 10 statements 6 were positive items and 4 were negative statements under the area of attitude of Hypertensive patients regarding Life style modification.

#### Data collection procedure: -

Prior permission was obtained from medical Director of JAH and Maheshwari Hospital, Gwalior to conduct the final study for Hypertensive patients attending OPD. The investigator utilized the convenient sampling technique to select the study subject. Investigator personally visited each respondent, introduced herself to the Hypertensive patients and explained the purpose of the study and ascertained the willingness of the participants. The respondents were assured anonymity and confidentiality of the information provided by them. Interviews were conducted during their leisure time. A comfortable

place was selected and the participants were made comfortable and relaxed. Data was collected with the help of interview schedule of knowledge questionnaire and attitude scale. Approximately 6 Hypertensive patients were interviewed per day and about 45 to 60 minutes were spent with each Hypertensive patients.

#### Limitations of the study

1. The study is limited to the persons who are clinically diagnosed as hypertensive patients
2. Hypertensive patients who are attending outpatient department in selected hospitals, Gwalior.
3. Sample size is limited to 60 Hypertensive patients.
4. Period of study is limited to 4-6 weeks.

#### Analysis and interpretations

##### Section I:- Base line characteristics of participants.

**Table 1: - Baseline characteristics of the participants**

Sl.no	Demographic variables	frequency	percentage
1.	<b>Age in years</b>		
	21-30 years	02	3.3
	31-40 years	30	50
	41-50 years	18	30
2.	51 to 60 years	10	16.7
	<b>Sex</b>		
2.	male	28	46.7
	female	32	53.3
3.	<b>Education qualifications</b>		
	secondary	14	23.3
	Higher secondary	30	50.0
4.	Degree	16	26.7
	<b>Occupation</b>		
	Daily wages	18	30
	Business	10	16.7
	Private employee	10	16.7
5.	Government employee	08	13.3
	House wife	14	23.3
	<b>Duration of illness</b>		
	<5 year	18	30
5.	6-10 year	34	56.7
	11-15 year	6	10
	>15 year	2	3.3
6.	<b>Family income</b>		
	<5000	8	13.3
	5001-10,000	30	50
	10001-15000	16	26.7
7.	>15000	6	10
	<b>Family type</b>		
	Joint family	16	26.7
	Nuclear family	44	73.3

8.	<b>Family history of hypertension</b>		
	Parents	18	30
	Sibling	32	53.3
	Grand parents	10	16.7
9.	<b>Dietary pattern</b>		
	Vegetarian	32	53.3
	Non vegetatrian	28	46.7
10.	<b>Habits</b>		
	smoking	24	40
	Alcohol	20	33.3
	Tobacco chewing	10	16.7
	None	6	10
11.	<b>Previous information regarding life style modification</b>		
	yes	18	30
	No	42	70
12.	<b>Source of information</b>		
	Friends	16	26.7
	Family members	26	43.3
	Mass media	6	10
	Health Professionals	12	20

**Section II: - knowledge level of participant regarding life style modifications**

**Table no 2: - knowledge level of participants**

Knowledge level	Poor	Average	Good
	10	39	11

**Section III: - attitude level of participant regarding life style modifications**

**Table no 2: - attitude level of participants**

Attitude level	Negative	Neutral	Positive
	8	32	20

**Section IV: - correlation between knowledge regarding life style modifications with attitude**

**Table no 2: - correlation between knowledge level with attidue regarding life style modification**

Correlation	Mean ± SD	Karl Pearson correlationcoefficient	Interpretation
Knowledge & Practice	9.40±2.28 26.23±7.50	r=0.52 P=0.001**	significant, positive, moderate correlation between knowledge and attitude. It means when knowledge increases their attitude score also increases moderately

\* significant at P≤0.05 \*\* highly significant at P≤0.01 \*\*\* very high significant at P≤0.001 Interpretation for r-value

Pearson correlation coefficient is denoted by “r”“r” always lies between -1 to +1

- 0.0 - 0.2 poor correlation
- 0.2 - 0.4 fair correlation
- 0.4 - 0.6 moderate correlation
- 0.6 - 0.8 substantial correlation
- 0.8 - 1.0 strong correlation

**Section V:- Assess the association between knowledge score with selected demographic variables.**

**Table no: - 5 chi square showing association between knowledge with selected demographic variables.**

Sl.no	Demographic variables	Knowledge level			Obtained value	Table value	Inferences
		Poor	Average	Good			
1.	<b>Age in years</b>				15.02	12.59	S
	21-30 years	0	2	0			
	31-40 years	3	16	11			
	41-50 years	5	13	0			
	51 to 60 years	2	8	0			

2.	<b>Sex</b>				0.06	5.99	NS
	male	5	18	5			
	female	5	21	6			
3.	<b>Education qualifications</b>				4.41	9.48	NS
	secondary	3	7	4			
	Higher secondary	3	21	6			
	Degree	4	11	1			
4.	<b>Occupation</b>				12.75	15.50	NS
	Daily wages	5	11	2			
	Business	2	7	1			
	Private employee	1	7	2			
	Government employee	2	2	4			
	House wife	0	12	2			
5.	<b>Duration of illness</b>				6.49	12.59	NS
	<5 year	3	9	6			
	6-10 year	5	24	5			
	11-15 year	1	5	0			
	>15 year	1	1	0			
6.	<b>Family income</b>				10.23	12.59	NS
	<5000	0	6	2			
	5001-10,000	5	16	9			
	10001-15000	3	13	0			
	>15000	2	4	0			
7.	<b>Family type</b>	2	11	3	0.27	5.99	NS
	Joint family						
	Nuclear family	8	28	8			
8.	<b>Family history of hypertension</b>	5	13	0	9.47	9.48	NS
	Parents						
	Sibling	4	18	10			
	Grand parents	1	8	1			
9.	<b>Dietary pattern</b>	7	20	5	1.45	5.99	NS
	Vegetarian						
	Non vegetatrian	3	19	6			
10.	<b>Habits</b>	4	18	2	17.82	6.59	S
	smoking						
	Alcohol	2	13	5			
	Tobacco chewing	3	7	0			
	None	1	1	4			
11.	<b>Previous information regarding life style modification</b>	2	14	2	1.85	5.99	NS
	yes						
	No	8	25	9			
12.	<b>Source of information</b>	3	9	4	10.96	12.59	NS
	Friends						
	Family members	3	21	2			
	Mass media	1	5	0			
	Health Professionals	3	4	5			

S=Significant, NS=not significant.

2=5.99, 4=9.48, 6=12.59, 8=15.50

The chi-square calculation explains that there was a significant association between knowledge level and the sociodemographic variables such as Age in years, habits as the chi-square value was greater than the table value at 0.05 level of significance.

**Section V:- Assess the association between attitude score with selected demographic variables.****Table no: - 5 chi square showing association between attitude with selected demographic variables.**

Sl.no	Demographic variables	Attitude level			Obtained value	Table value	Inferences
		Negative	Neutral	Positive			
13.	<b>Age in years</b>				5.18	12.59	NS
	21-30 years	0	2	0			
	31-40 years	3	15	12			
	41-50 years	2	10	6			
	51 to 60 years	3	5	2			
14.	<b>Sex</b>				6.18	5.99	S
	male	7	13	8			
	female	1	19	12			
15.	<b>Education qualifications</b>				1.16	9.48	NS
	secondary	2	8	4			
	Higher secondary	3	17	10			
	Degree	3	7	6			
16.	<b>Occupation</b>				2.22	15.50	NS
	Daily wages	0	12	6			
	Business	3	5	2			
	Private employee	2	4	4			
	Government employee	1	1	6			
	House wife	2	10	2			
17.	<b>Duration of illness</b>				6.54	12.59	NS
	<5 year	1	13	4			
	6-10 year	6	14	14			
	11-15 year	1	3	2			
	>15 year	0	2	0			
18.	<b>Family income</b>				3.17	12.59	NS
	<5000	0	4	4			
	5001-10,000	4	18	8			
	10001-15000	3	7	6			
	>15000	1	3	2			
19.	<b>Family type</b>				6.88	5.99	S
	Joint family	1	13	2			
	Nuclear family	7	19	18			
20.	<b>Family history of hypertension</b>				7.20	9.48	NS
	Parents	5	9	4			
	Sibling	1	19	12			
	Grand parents	2	4	4			
21.	<b>Dietary pattern</b>				2.54	5.99	NS
	Vegetarian	4	20	8			
	Non vegetatrian	4	12	12			
22.	<b>Habits</b>				7.83	6.59	S
	smoking	5	11	8			
	Alcohol	3	11	6			
	Tobacco chewing	0	8	2			
	None	0	2	4			
23.	<b>Previous information regarding life style modification</b>				2.37	5.99	NS
	yes	6	6	6			
	No	2	26	14			

24.	Source of information				10.84	12.59	NS
	Friends	1	13	2			
	Family members	6	10	10			
	Mass media	1	3	2			
Health Professionals	0	6	6				

S=Significant, NS=not significant.

2=5.99, 4=9.48, 6=12.59, 8=15.50

The chi-square calculation explains that there was a significant association between Attitude level and the sociodemographic variables such as sex, family type, habits as the chi-square value was greater than the table value at 0.05 level of significance.

### Conclusion:-

The result of this study shows that The level of knowledge of Hypertensive patients regarding Life style modification shows 16.7 % of them having poor knowledge and 65 % of them having average knowledge, 18.3% of them having good knowledge. The level of attitude of hypertensive patients on life style modification shows 13.3% of them having unsatisfactory attitude, 53.4% of them having moderately satisfactory attitude, 33.3% of them are having satisfactory attitude. The Correlation between Knowledge and Attitude of Hypertensive patients regarding Life style modification shows significant positive, moderate correlation. The researcher prediction says when knowledge increases their attitude score also increases moderately, Based on the study there was an association between the knowledge and attitude score of the Hypertensive patients with selected socio-demographic variables like age, and habits are significantly associated with their level of knowledge and sex, habits are significantly associated with their level of attitude

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