A study on hypertensive patient's knowledge and compliance to treatment attending Primary Health Centre of Kathua district, J&K: A Cross- Sectional Study

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ABSTRACT

INTRODUCTION- One of the major public health concern is hypertension and it became one of the main parts of epidemiological transition in both the developed and developing countries.

Objective-To assess the patient's knowledge and compliance to treatment attending Primary Health Centre of Kathua district, J&K hypertensive using WHO standardized Questionnaire for knowledge, adherence to medication and awareness.

Material and Methodology- A cross- sectional study was conducted at the OPD clinic of Primary Health Centre Budhi, now known as Rural health training Centre under the department of Community Medicine, GMC Kathua. The hypertensive patients attending the OPD were included in the study. The study was conducted during a period of 2 months in the month of December 2019 and January, 2020 .

Results- Altogether 153 hypertensive patients were enrolled in the study. Among the participants, males were 44.33% and females were 55.66%. Maximum hypertensive respondents go for their routine blood pressure check whenever they do not feel well. 36.33% of the respondents had blood history of hypertension. Maximum number of patients took the medication only when they feel that they need them. About 61% were aware of any complications of hypertension.

Conclusion- Proper health educational activities need to be undertaken at community level to increase the awareness about the benefits of adherence of the medication.

Keywords: Hypertension, WHO, Medication adherence.

INTRODUCTION

One of the major public health concerns is hypertension and it became one of the main parts of epidemiological transition in both the developed and developing nations. India is already mentioned as the "World's Diabetic Capital," and now Hypertension will replace Diabetes in the coming years.[1] The sedentary lifestyle, aging, obesity, urbanization, sedentary lifestyle, obesity, excess consumption of salt are the important contributing factors which results in epidemiological transition. It is known as disease of many complications with maximum risk of cardiovascular diseases.[2] Many morbidities and mortalities related to hypertension reduced on controlling the blood pressure at the initial level.[3] Hypertensive Patients' compliance or adherence to treatment results in preventing the further increase in blood pressure as well as complications.[4]The number of hypertensive in India estimated to be double from 118 million in 2000 to 213.5 million by 2025. About one-fourth (24.9%) of the hypertensive patient's residing in rural India are availing treatment and in

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case of urban area just 37.6% are availing treatment.[5,6]

The awareness related to any disease and the morbidity associated with it results in the maximum impact on the managing the disease at its earliest stage. In addition, low awareness has a direct influence on medication adherence which ultimately leads to poor clinical outcome. The World Health Organization (WHO) definition of adherence to hypertensive medication considers patient's behaviour of taking medication with diet control as well as improving lifestyle behaviour after recommendation from health care provider.[4]Because of the non-adherence to the medication, it results in both adverse health outcomes as well as health care costs are also increased.[7]In India, some studies had reported 27%-70% non-adherence to medication among the hypertensive patients.[8, 9]

Material and Methodology-

A cross- sectional descriptive study was conducted at the Rural Health Training Centre, Budhi which is a field practice area of department of Community Medicine, GMC Kathua. The study was conducted at the OPD clinic of Primary Health Centre Budhi. The hypertensive patients attending the OPD were included in the study. The study was conducted during a period of 2 months in the month of November and December, 2019. The hypertensive patients who were above the age of 30 years were included in the study except for pregnant and lactating females. The study tool used was WHO Standardized questionnaire of "Developing Integrated response of developing health care systems to rapid population Ageing".[10] All the Information which was related to socio-demographic details as well as regarding questionnaire details

gathered from the hypertensive patients attending the Primary Health Centre OPD after taking individual consent from them. 153 patients were selected by

Systematic randomized controlled sampling method Data was entered in Microsoft excel. Descriptive statistical analysis was expressed in form of number and percentages. The study was carried after taking institutional ethical clearance. Morisky Medication Adherence Scale. was the adherence scale used further for checking the level of non-adherence. It is a 8 item

(Never/rarely/sometimes/often/always). And further scored as low adherence (<6), medium adherence (6 to <8), and high adherence (=8). All respondents who answered "yes" for the question scale were considered as non-adherent for at least one question.

RESULTS

Our study enrolled 153 patients which consist of maximum females as compared to males with maximum participants belonged to the age group of 60-70 years.(Table 1) with maximum respondents were non-alcoholic and non-smokers. Table 2 revealed the questions related to the diagnosis of hypertension. Maximum patients came to know about the hypertension disease during routine check-up at the Primary health centres. Table 3 revealed the status about the management of hypertension among the respondents. Maximum respondents preferred nearby Pharmacy store for routine blood pressure check-up. Regarding complications of hypertension, maximum patients were admitted in the hospital due to the complications associated with it during the past one year. For knowledge and adherence data, respondents were having good knowledge with poor adherence.(Table 4,5,6.)

Table 1: Demographic characteristics of the respondents (N=153)

S.No.	Variables	N(%)
1.	Age group	
	30-40yrs	10(6.53%)
	40-50yrs	26(16.99%)
	51-60yrs	49(32.02%)
	60-70yrs	55(35.94%)

2.	>70yrs	13(8.49%)
	Gender	
	Males.	68 (44.33%)
	Females.	85 (55.66%.)
3.	Alcohol per day Consumption(ml)	
	Nondrinkers (0 or occasional)	101(66.01%)
	Moderate drinkers (1–100)	20(13.07%)
	Heavy drinkers (>100)	32(20.91%)
4.	Smoking cigarettes per day	
	Nonsmokers (0)	121(79.08%)
	Smokers (>1)	32(20.91%)

Table 2: Diagnosis of Hypertension

S.NO.	Questions	Responses N (%)
1.	How did you come to know about your hypertension?	
	In a routine medical control	47(30.71%)
	Screening programme	39(25.49%)
	Emergency service	18(11.76%)
	Other(specify)	16(10.45%)
	I don't know	33(21.56%)
2.	Where were you first diagnosed as having hypertension?	
	Primary health centre	55(35.94%)
	Secondary care hospital	31(20.26%)
	Tertiary care hospital	29(18.95%)
	At a pharmacy/drug store	7(4.57%)
	Other	18(11.76%)
	Don't know	13(8.49%)
3.	When were you diagnosed?	
	First time	26(16.99%)
	<5 yrs	46(30.06%)

	>5 yrs	81(52.94%)
4.	Was the clinic or hospital where you were first diagnosed run by the government, a charitable organization or was it privately run? Public Private NGO/Charity organization	 92(60.13%) 53(34.64%) 8(5.22%)
5.	Where do you regularly go for routine follow up to check your blood pressure? Diagnosis on this visit Nearby PHC Nearby secondary hospital Tertiary hospital Do not do any routine follow up	 12(7.84%) 79(51.63%) 34(22.22%) 10(6.53%) 18(11.76%)
6.	Do you have to pay fees for consultation and drugs at the facility that you regularly go to for the treatment of your hypertension? Paid nothing Paid part Paid fully Paid Don't know	 90(58.82%) 20(13.07%) 43(28.10%) - -

Table 3: Management of hypertension

S.No.	Questions	Responses N(%)
1.	Have you been told by a doctor or nurse or someone by this health centre to control your blood pressure?	127(83%)
2.	When do you go for your routine blood pressure check?	
	Diagnosis on this visit	7(4.57%)
	As advised by the doctor	59(38.56%)
	When I do not feel well.	62(40.52%)
	Both	25(16.33%)
	Other (specify)	-
3.	Besides a Primary health centre, how else do you get your blood pressure measured (checked)?	
	Secondary care hospital	
	Tertiary care hospital	37(24.18%)
	Neighbour/family member	10(6.53%)
	Myself	2(1.30%)
	Nearby pharmacy	2(1.30%)
	I only checked my blood pressure in the PHC	81(52.94%)
		21(13.72%)
4.	Compared to 12 months ago, is your blood pressure:	
	Better	101(66%)
	Same	17(11.2%)
	Worse	9(5.88%)
	I don't know	4(2.61%)
	I didn't get my BP measurement 12 months ago	22(14.37%)

Table 4: Complications and hospitalization

S.No	Questions	Responses N(%)
1.	Do you have blood relatives with history of hypertension?	62(40.52%)
2.	Over the last year have you been admitted to the hospital?	29(18.95%)
3.	Was it related to hypertension?	11(7.18%)
4.	Have you had any complications from your hypertension?	51(33.33%)

Table 5: Medications and adherence

S.No	Questions	Responses N(%)
1.	Have you been prescribed any medication to lower your blood pressure?	143(93.46%)
2	Do you take all your prescribed medications?	89(58.16%)
3.	If you don't take your medication regularly, why don't you take them as directed?(n=64) Cannot afford the cost Medications are not easily available. I don't like to take medications I only take them when I feel that I need them I don't like the side effects of the medication I prefer alternative medicine I forget I don't know other	16(25%) 4(6.25%) 11(17.18%) 21(32.81%) 2(3.125%) - 10(15.625%)

Table 6: knowledge and self care

S.No.	Questions	Responses N (%)
1.	Are you aware of any complications of hypertension?	119(77%)
2.	If you were aware, have you been informed by the doctor or nurses or someone by the health centre about these complications?	119(77%)
3.	Have you been told that stroke is related to hypertension?	90(58.82%)

Table 7: Hypertensive Patient's drug adherence 8- item questionnaire (*Morisky Medication Adherence Scale)*

S.No	Questions	Yes N(%)	No N(%)
1.	Do you sometimes forget to take your medication?	10(6.53%)	143(93.46%)
2.	People sometimes miss taking their medication for reasons other than forgetting. Thinking over the past two weeks, were there any days when you did not take your medication?	54(35.29%)	99(64.70%)
3.	Have you ever stopped or taken again medication without telling doctor?	60(39.21%)	93(60.78%)
4.	When you leave/travel home, do you sometimes forget to take your medication?	6(3.92%)	147(96.07%)
5.	Did you take your medicine yesterday?	77(50.32%)	76(49.67%)
6.	When you feel like your health is under control, do you sometimes stop your medication?	23(15.03%)	130(84.96%)
7.	Taking tablets every day is really unconvincing for some people .Do you ever feel hassled about sticking to your treatment plan?	50(32.67%)	103(67.32%)

8.	How often do you have difficulty remembering to take all your medicine?	47(30.71%)	106(69.28%)
		39	114(74.50%)
	Never/rarely—4	8	145(94.77%)
	Once a while—3	-	
	Sometimes—2	-	
	Never—1		

DISCUSSION

Hypertension is one of the public health challenges which are considered as burden on our health system. It is significant risk factor which adheres to the rule of halves which states that the half patients are undiagnosed with half which are diagnosed are not treated and out of those who are treated have blood pressure which is uncontrolled. It is one of the notifiable diseases so health care worker as well as community should focus on promoting its awareness and decreases the reasons which lead to non-adherence. Many efforts which lead to control HT include increasing the knowledge of community as well as increase the awareness regarding the risks associated with increase B.P. We conducted the cross-sectional descriptive study to assess and evaluate the hypertension knowledge, awareness, adherence and compliance to treatment among the patients attending Primary Health Centre of Kathua district, J&K. The maximum participants were between the age group of 60-70 years followed by 61-70 years and these similar and dissimilar observations were also observed in other studies.[10,11] Maximum patients were females and maximum non-adherence towards the medication seen in females as compared to other study.[12]

To improve public knowledge regarding Hypertension, program was launched in 1972. After that, increase in BP awareness was reported from 51%- 73% from the National Health and Nutrition Examination Survey (NHANES II and NHANES III) data.[13,14]

Maximum patients came to know about their hypertension from the routine check- up which was regularly done at Primary health centres and follow-up was also done maximum at Primary health centres. 60.13% of hypertensive patients in rural areas preferred government hospital for treatment and follow-up in our study. But maximum hypertensive patients preferred nearby pharmacy for routine BP check-up.

Major barrier in the hypertensive treatment is adherence to medication because if the patients are non-adherent to medication, it leads to uncontrolled hypertension. In case of medication and adherence, 58.16% of respondents had taken prescribed medicines on daily basis and rest didn't adhere to the prescribed medication due to various reasons like they only took them when they felt that they need them, they didn't like to take medication and they maximum time forget to took the medication and these reasons were also seen in other studies as well.[12,15] And the adherence level further evaluated by using Morisky Medication Adherence Scale . Our study also revealed that the patients had good knowledge about the hypertension disease but poor adherence as shown by using the scale.

Conclusion

Proper health educational activities need to be undertaken at community level to increase the awareness about the benefits of adherence of the medication. Maximum non- adherence was seen among patients with comorbidities and also in those taking multiple medications. In these cases, alarm system for medication like calls can also be used as used in DOTS patients.

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