



COMPLIANCE OF HYPERTENSIVE PATIENTS WITH TREATMENT ACCORDING TO WHO GUIDELINES IN A TERTIARY CARE HOSPITAL IN COIMBATORE

Pharmacology

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ABSTRACT

Introduction: Hypertension is one of the clinical condition which requires long term therapy. Successful treatment of hypertension depends largely on the patient's compliance with the therapeutic plan. Non-compliance is one of the main reason for uncontrolled hypertension.

Objective: The objective of our study was to evaluate the compliance of hypertensive patient's attending Government Medical College and ESIC Hospital, Coimbatore, TamilNadu, India.

Methodology: This is a cross-sectional study with random sampling of patient's on three drugs or more for hypertension. The sociodemographic data's and the subjective information was obtained by using a preformed questionnaire. Clinical data of the patients were obtained by reviewing patient's medical records.

Results: Total percentage score for compliance was around 42.3%. The best compliance was with regular periodic follow-up which was followed by regular intake of hypertensive medication and the laboratory investigations. The compliance of taking hypertensive medications was good which was 98%. Exercise had the worst compliance. It was found that poor compliance was with exercise and dietary habits i.e. taking low sodium food.

Marital status, level of education, work status, smoking and dietary habits, the patient's prescription for hypertensive, and the distance of the patient's residence from the hospital were the factors which governed the compliance of the patients.

Conclusion: Healthy lifestyle, educating patients and their family and finally strengthening the communication between the physicians and patients will enhance the compliance of hypertensive patients with their therapeutic regimen.

KEYWORDS

Introduction:

Hypertension is one of the most common chronic health problem worldwide. In 2000 about 26% of the adult population worldwide had hypertension¹, of which 90 – 95 % of adult hypertension was essential hypertension². Treatment of mild to moderate hypertension reduces the risk of myocardial infarction by 15%³ and stroke by 30-43%^{4,5,6,7}.

The most common cause of uncontrolled hypertension is poor adherence to treatment regimen^{8,9,10}. According to Sackett and Haynes compliance is defined as patient's attitude to seek for medication, following the prescription according to the physician's advice and executing healthy life style modifications¹¹.

WHO defines compliance as the extent to which the patient complies with the clinician's advice and regimen when taking drugs¹². Complications and mortality because of hypertension can be reduced by good adherence to the treatment regimen^{13,14}. Once the patients have good compliance towards the treatment regimen the outcome of hypertension will also improve.

Therefore the aim of our study was to evaluate the compliance of patients with the hypertensive treatment regimen in a tertiary care hospital in Coimbatore.

Methodology:

INCLUSION CRITERIA:

Patients on three drugs for hypertension for at-least 1 month or more.

EXCLUSION CRITERIA:

Patients on less than three drugs for hypertension
Newly diagnosed hypertensive patients and recently started three drugs for hypertension for less than a month.

MODE OF STUDY

Prospective Cross sectional observational study using a preformed questionnaire.

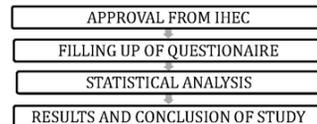
Study Group: Patients taking three drugs for hypertension for at-least 1 month or more than 1 month.

Study Place: Government Medical College and ESIC hospital Coimbatore

Study period: August 2017 to September 2017

Sample Size: 100

METHOD



Results:

Socio-demographic and disease characteristics of hypertensive patients

Questionnaire:	Yes %	No %
Educated patient	96	4
Is the patient married?	99	1
Working patient	100	-
Smoker	81	19
Co-morbid conditions	93	7
Patient's knowledge about the response to the medication	87	13

Compliance of patients with the hypertensive treatment regimen

Patients comes for regular periodic follow-up?	98	2
Follows the hypertensive dietary regimen	41	59
Patient does regular exercise	9	91
Patient does periodic laboratory investigations	87	13

Patients takes the medication regularly	98	2
Follows the prescription given by the physician	99	1
Frequently misses the appointment fixed for the follow-up	2	98
The patient taking three drugs for hypertension, if one of the drug gets over then:		
i) Self-medication by the patient	3	29
ii) Patient takes only the remaining two tablets for hypertension	36	27
iii) Patient goes to the nearby pharmacy and asks for the same drug	59	9
iv) Patients seeks the advice and follows the drug given by the pharmacist in the nearby pharmacy	2	39

The average age of the study group was 44.7 years, and the mean duration of hypertension was 3.6 years. Majority of patients included in this study were educated, married and were employed. Only 19% of non-smokers had a good compliance, when compared 81% of the smokers.

Around 93% of patients included in our study had a comorbid condition. There were 87% of patients who had knowledge about symptoms in response to the medication therefore these patients had good compliance.

The best compliance was with regular periodic follow-up, periodic laboratory investigation, and taking medications regularly according to the physician's advice. Compliance was poor for exercise and the dietary regimen.

All the patients are on three drugs, of which some patients with worst compliance are the patients who missed the appointment for follow-up. If among the three anti-hypertensives, one had become stockless then around 59% of the study population sought to buy the same drug from the pharmacist as prescribed by the physician, whereas around 36% continued with the remaining two anti-hypertensive medications, thus sighting poor compliance.

Patients with worst compliance are those taking self-medication and those patients approaching the nearby pharmacy for medication and advice, they were around 2 and 3% respectively.

Discussion:

It was found in our study worst compliance was with exercise and dietary regimen. There are studies saying patients with optimal weight, having healthy dietary plans with regular exercise have a significant reduction and maintenance of blood pressure^{15,16}.

Compliance level varies from one patient to another patient. Factors like level of education, work status, smoking habits and the patient's prescription for hypertension are the factors which alters the compliance level. Complexity of the therapeutic regimen is one major factor which causes worst compliance.

The outcome of chronic diseases like hypertension depends directly on adherence of patients to their therapeutic regimen¹⁷. Adherence to the treatment regimen involves behavioural changes, understanding and learning to take medications regularly. If the patients are encouraged and reminded to take drugs regularly according to treatment schedule and to go for the routine follow-up with the help of their family members this will definitely enhance the patients to adhere to their hypertensive treatment regimen.¹⁸

The complications of hypertension and the importance of maintaining blood pressure must be explained to the patients. Physicians should guide the patients how to manage with the missed doses. It is the duty of the physician to guide the patients about the adverse drug reaction due to the antihypertensive drugs. Patients should be taught to identify and report the adverse drug reactions.¹⁸

Conclusion:

Patients should be advised and educated to follow the non-pharmacological measures to reduce the blood pressure.

If the health care professionals are able to identify the risk factors which makes the patient non-adherent to the treatment, steps can be initiated to improve the adherence.

Adherence to the therapeutic regimen can be enhanced by taking the patient's preference and work status into consideration before initiating or altering the medication.

The above steps can be initiated to make the patient adhere to the pharmacological regimen.

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