

# A Questionnaire Based Assessment of Compliance to Hypertensive Drugs in Govt Primary Health Centre Chinnalapatti, Dindigul District

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**Abstract:** **Background:** Noncompliance to antihypertensive drugs is a major reason for poor control of hypertension worldwide. **Aim and objective:** To assess the level of compliance to antihypertensive therapy and to identify the factors contributing to poor compliance in primary care hypertensive patients. **Materials and Methods:** A cross sectional objective questionnaire based observational study involving hundred hypertensive patients who are already on treatment in Govt Primary Health Centre, Chinnalapatti. Adherence was measured using a validated survey form consisting of twelve questions. Patient demographic data, diagnosis and treatment particulars were collected from record maintained in NCD clinic. **Results:** Good compliance with drug treatment was observed in 44% of the respondents and poor compliance among the others. Poor compliance was found to be mainly due to forgetfulness to take drugs (64%), self withdrawal of drugs after normal BP recordings (61%), on improvement of symptoms (32%), and on worsening of symptoms (27%). **Conclusion:** The medication adherence rate was found to be low among Primary Care hypertensive patients. This will negatively affect the blood pressure control. No doubt there is a need to invent more effective education strategies directed towards the public in general and the patients in particular.

**Keywords:** Antihypertensive drugs, Compliance, Primary care patients

## 1. Introduction

Developing countries undergoing epidemiological transition face the double burden of communicable and non-communicable diseases. Of the latter, hypertension is one of the most important treatable causes of mortality and morbidity. Although safe and effective drugs are available, the management of hypertension is still far from optimal especially in the developing countries. A major factor accounting for inadequate treatment of hypertension is poor compliance.

Compliance can be defined as the degree to which the patient conforms to medical advice about lifestyle, dietary changes as well as to keeping up appointments for follow up and taking treatment as prescribed. This can be expressed quantitatively as the percentage of prescribed doses that have been taken.

Compliance can be evaluated in several ways. These include pharmacological measures (determination of serum and urinary concentrations of drugs or using biological markers integrated into the tablets); clinical measures (clinical judgement of the doctor, evaluation of promptness for appointments and the use of questionnaires); and physical measures (verifying prescription renewals, counting the remaining pills or pill counting systems). Although, there is no gold standard allowing precise measurement of compliance, the electronic pill counter or MEMS (Medication Event Monitoring System) may be considered as the best existing system for measurement of compliance.

Pharmacological measures also have a higher sensitivity and specificity but remain difficult to use in standard practice. Poor compliance is especially common when a patient has poor knowledge, understanding, and perception about hypertension or when a complex anti-hypertensive drug regime is prescribed. Incidence of complications is observed to be high in hypertensive patients with poor compliance. This explains the need for more awareness and immediate adjustment in the management pattern with emphasis on compliance.

### Aim

The aim of this study was to assess the level of compliance to anti-hypertensive therapy and identify factors, which contribute to poor treatment compliance among hypertensives in Govt Primary Health centre, Chinnalapatti.

### Study Design and Study Centre

A Cross sectional Descriptive Questionnaire based study conducted at Govt Primary Health Centre, Chinnalapatti involving 100 Hypertensive patients. This study was started after obtaining prior permission from institutional authorities.

**Study Period:** JULY 2016( one week)

## 2. Methodology

One hundred hypertensive patients which includes 50 male and 50 female patients were selected randomly in primary

health centre chinnalapatti and interviewed by closed- ended questionnaire to assess the level of compliance to anti hypertensive drugs after obtaining informed consent from the participants.

Information obtained includes socio demographic characteristics of respondents, marital status, family income, family size, earning member of family, co morbid illness, regularity of patient's attendance at the hypertension clinic; patient's reported compliance with prescribed drugs and reasons for non compliance.

Patients' compliance were classified using the following criteria. Good compliance includes regular attendance at follow-up clinics, obtaining and taking all drugs prescribed. Poor compliance includes irregular attendance at follow-up clinics, not taking drugs as prescribed.

**Questionnaire**

The questionnaire was framed in English language after getting validation by our professors and they were explained in mother tongue. The questionnaire contain twelve questions were related to compliance of antihypertensive drugs.

**3. Results**

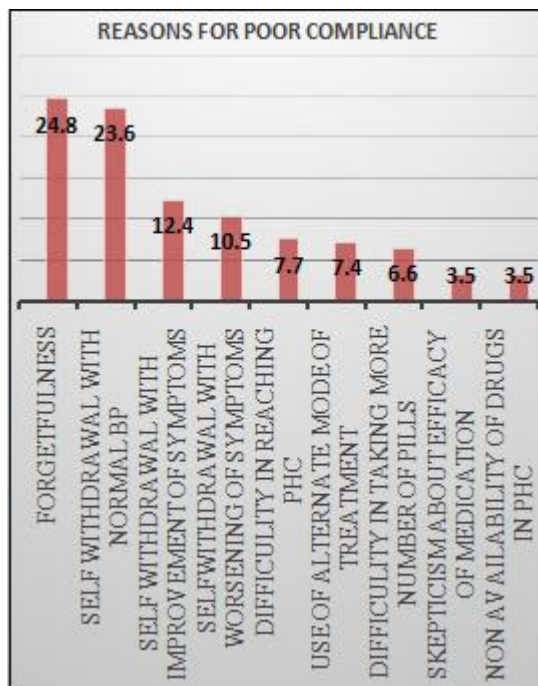
Compliance was found to be good in 44% of the respondents. Poor compliance was found to be mainly due to forgetfulness to take drugs (64%), self withdrawal of drugs after normal BP recordings(61%), on improvement of symptoms (32%), and on worsening of symptoms (27%).

**Table 1:** Level of compliance with drugs among Hypertensive patients

Compliance level	Frequency	Percentage (%)
Poor	56	56
Good	44	44
Total	100	100



Reasons	Percentage (%)
Forgetfulness	24.8
Self withdrawal with normal BP	23.6
Self withdrawal with improvement of symptoms	12.4
Self withdrawal with worsening of symptoms	10.5
Difficulty in reaching PHC	7.7
Use of alternate mode of treatment	7.4
Difficulty in taking more number of pills	6.6
Skepticism about efficacy of medication	3.5
Non availability of drugs in PHC	3.5



**4. Discussion**

This study revealed that more than half of the hypertensive patients in Govt. Primary health centre had poor compliance with respect to drug treatment. At an adherence rate of 44% found in this study, it is clear that on most occasions, missing a dose was mainly due to forgetfulness. This could be achieved by corresponding with certain activities, such as meal time or by setting alarms to go off at time of medication during the initial days of their therapy.

The study also shows that optimal control of hypertension was impeded by poor patient-physician communication. Based on the findings of this study there is a need for launching a comprehensive approach involving health care providers, patients and the general public especially with the aim of educating patients on the need to take their drugs regularly and in the manner prescribed. Getting patients involved in their treatment by imparting relevant knowledge often empowers patients to be more concerned about their health. This can be achieved through more counseling and interactions by health care professionals. A lot of improvement is possible in this area in Primary Health Care by training and mobilizing the health care givers.



**5. Conclusion**

The medication adherence rate was found to be low among Primary Care hypertensive patients. This will negatively affect the blood pressure control. Definitely there is a need to invent more effective education strategies directed towards the public in general and the patients in particular.

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