COMPLIANCE TO ANTI HYPERTENSIVE AND ANTI DIABETIC MEDICATIONS

Gupalli Laxmi Narasimha*, Vipparthi Chandra Mouli, Miesala Anand Kumar, Madatha Umesh, Akkenapally Krishna and Mohammed Rehan Qureshi

Department of Pharmacy Practice, Pharma D Students, Hyderabad.

*Correspondence for Author

Gupalli Laxmi Narasimha

Department of Pharmacy Practice, Pharma D students, Hyderabad.

INTRODUCTION

Good pharmacological compliance is important in the management of hypertension and diabetes mellitus to maintain optimum blood pressure and metabolic control, which in turn reduces the risk of complications. For antihypertensive and anti diabetic treatment to be effective, it is important that patients are advised to take all their medications every day and at the same time each day.

AIM

The aim of this study was to evaluate compliance to antihypertensive and anti diabetic medications of patients visiting the Endocrinology Department at B.B.R hospital Hyderabad.

METHOD

125 patients were recruited by convenience sampling, according to established inclusion criteria (patients diagnosed with type 2 diabetes mellitus and co-existing hypertension, speak English and > 18 years) over a four-week period. These patients were asked to complete a previously validated[2,3]self-administered.'Morisky 8-Item Medication Adherence Questionnaire' to evaluate pharmacological compliance. The questionnaire consists of 7 'Yes' and 'No' questions and 1 'multiple choice' question. Each question was given a score of 1 or 0, depending on the question. A total score of 0 was classified as 'high', 1 or 2 as' medium' and > 2 as 'low' compliance. Correlations were analysed using the Likelihood Ratio test.

RESULTS

125 patients participated; 60.8% were male, 27.2% were between 50 and 59 years, 34.4% were educated to primary level, 14.4% were retired and 28.8%was literate and 22.4%

Illiterate. A 'high' compliance score was obtained by 52% patients (Figure 1). 90.8% of the patients claimed to have taken all their medications as prescribed on the day before the questionnaire was distributed. 87% of the patients stated that they do not stop taking their medications when they feel their symptoms are controlled and 92% of the patients do not stop taking their medications without their physician's advice even if they feel worse (Table 1).

No statistically significant correlations for compliance with gender, age, occupation or living situation were obtained, probably due to a small sample size.

Table 1: Pharmacological Compliance (N=125)

| QUESTIONS		YES %	No%
Do you sometimes forget to take your blood pressure medications		13.6	86.4
In the last 2 weeks was there any day when you did not take your blood pressure medications?		22.4	77.6
Have you ever stopped taking your medications or decreased the dose without first warning your doctor because you felt worse when you took them		10.8	89.2
When you travel or leave the house do you sometimes forget to take your blood pressure medications?		17.6	82.4
Did you take your high blood pressure medication yesterday?		90.8	9.2
When you feel your blood pressure is controlled, do you sometimes stop taking your medication		12.4	87.6
Have you ever felt distressed for strictly following your high blood pressure treatment?		13.6	86.4
How often do you have difficulty to remember all your blood taking pressure medications?	Never	54.4	
	Almost Never	20.0	
	Sometimes	14.4	
	Frequently Always	11.2	
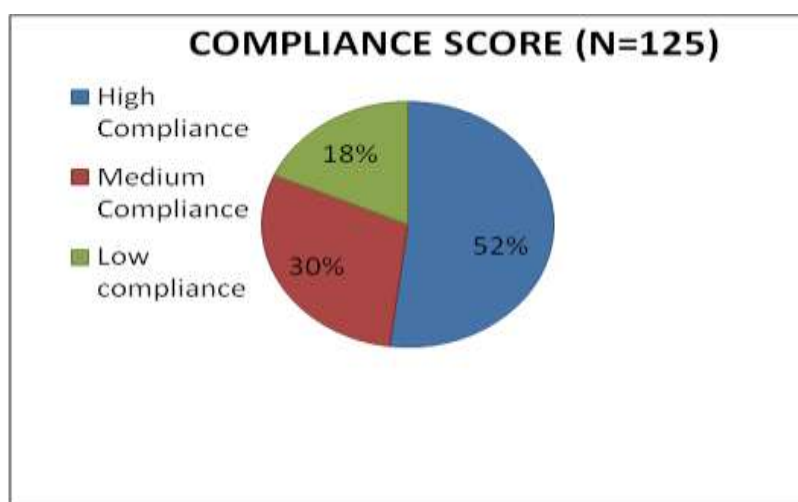
Figure 1: Compliance Score (N=125)

CONCLUSION

Most patients in this study showed a 'high' pharmacological compliance. Systems to identify the 'medium' and 'low' compliers should be adopted so that pharmacists in this setting could support patients to improve compliance. Although patient self-reporting is a commonly used indirect method to evaluate compliance, limitations include bias by inaccurate patient recall or by social desirability, whereby patients report an overly optimistic estimation.

ACKNOWLEDMENT

REFERENCES

1. World Health Organisation (WHO). Adherence to long-term therapies: Evidence for action [Online]. Switzerland: WHO; 2003 [cited 2013 Oct 4]. Available from: URL: www.who.int/ chp/knowledge/publications/adherence_full_report.pdf

2. Morisky DE, Green LW, Levine DM. Concurrent and predictive validity of a self-reported measure of medication adherence. Med Care., 1986; 24: 67-74.

3. Morisky DE, Ang A, Krousel-Wood M, Ward HJ. Predictive validity of a medication adherence measure in an outpatient setting. J Clin]Hypertens., 2008; 10: 348-54.

4. Ho PM, Bryson CL, Rumsfeld JS. Medication adherence: Its importance in cardiovascular outcomes. Circulation., 2009; 119: 3028-35.