Compliance to Antihypertensive Drug Therapy Among Diagnosed Patients

Raunit Singh

Department of Community Medicine
Dr. D. Y. Patil Medical College, Hospital & Research Centre, Pune, India
krraunitsingh2000@gmail.com

Abstract—**Hypertension is a major non-communicable disease contributing significantly to global morbidity and mortality. Effective control of blood pressure largely depends on patient adherence to antihypertensive medication. This study aimed to assess the level of compliance to antihypertensive drugs among diagnosed hypertensive patients and to identify factors influencing non-compliance. A cross-sectional descriptive study was conducted among 60 hypertensive patients attending a tertiary care hospital in Pune. Medication adherence was assessed using the Morisky Medication Adherence Scale (MMAS-8). The study found that 36.7% of patients had high adherence, 26.7% had medium adherence, and 36.7% showed low adherence. Factors such as educational status, socioeconomic background, duration of treatment, polypharmacy, and presence of comorbidities influenced adherence levels. The findings highlight the need for patient education, simplified treatment regimens, and targeted counseling to improve long-term adherence and reduce hypertension-related complications.**

Index Terms—**Hypertension, Medication adherence, MMAS-8, Antihypertensive drugs, Compliance**

I. Introduction

Hypertension is a chronic non-communicable disease characterized by persistently elevated blood pressure and is a major risk factor for cardiovascular diseases, stroke, and renal failure. Globally, more than 1.28 billion adults are affected, with a significant burden in low- and middle-income countries such as India. Despite the availability of effective antihypertensive medications, blood pressure control remains suboptimal, largely due to poor medication adherence.

II. Review of Literature

Studies conducted in India have demonstrated varying levels of adherence to antihypertensive therapy. A meta-analysis reported an overall adherence rate of 15.8%, with non-adherence associated with advanced age, low socioeconomic status, complex drug regimens, and presence of comorbidities. Community-based studies using validated adherence scales such as MMAS-8 have highlighted the role of education, family support, and accessibility to healthcare services in improving compliance.

III. Methodology

A cross-sectional descriptive study was conducted among 60 diagnosed hypertensive patients admitted to Dr. D. Y. Patil Medical College, Hospital & Research Centre, Pune. Adult patients aged 18 years and above who were receiving antihypertensive medication for at least one month were included. Medication adherence was assessed using the Morisky Medication Adherence Scale (MMAS-8). Data were collected through structured interviews and analyzed using Microsoft Excel and Jamovi software.

IV.   Results

The study revealed that 36.7% of patients had high adherence, 26.7% had medium adherence, and 36.7% had low adherence to antihypertensive medication. Lower adherence was more common among patients with lower educational status, longer duration of treatment, and those with multiple comorbidities requiring polypharmacy.

V.   Conclusion

Medication adherence among hypertensive patients remains suboptimal and is influenced by multiple interrelated socio-demographic and clinical factors. The use of the MMAS-8 scale provided a structured assessment of adherence. Targeted patient education, simplified treatment regimens, and continuous counseling are essential to improve long-term adherence and reduce hypertension-related complications.

References

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