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# EXAMINING MEDICATION ADHERENCE AMONG PATIENTS WITH CHRONIC DISEASES: A RESEARCH STUDY

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### **ABSTRACT**

Medication adherence is vital for the effective management and prognosis of chronic diseases. This study aimed to assess medication adherence levels among patients with various chronic conditions and to identify factors influencing adherence behavior. A systematic review and meta-analysis were conducted, searching major databases for studies published between 2010 and 2024. Eligible studies assessed medication adherence using validated measures such as self-reporting, pill counts, pharmacy refill records, and electronic monitoring devices. The review included studies from different geographic regions and diverse patient populations. Results showed a wide range of adherence rates among patients with chronic diseases, with an overall adherence rate of 80%. Factors influencing medication adherence included socioeconomic status, education level, health literacy, complexity of medication regimens, side effects, and patient-provider communication. Interventions such as patient education, reminder systems, and simplification of medication regimens demonstrated potential in improving adherence. However, further research is needed in diverse patient populations. Enhancing medication adherence among patients with chronic diseases remains a critical aspect of healthcare delivery to optimize health outcomes and reduce healthcare costs.

KEY WORDS: Medication adherence, Chronic diseases, Socioeconomic status

## INTRODUCTION

Globally, chronic illnesses such as diabetes, hypertension, heart disease, and chronic respiratory disorders pose significant public health challenges. Effective management of these conditions often requires long-term pharmaceutical treatment to control symptoms, prevent complications, and improve quality of life. However, successful chronic disease care depends not only on the availability of appropriate medications but also on patients adhering to prescribed treatment plans[1].

Medication adherence refers to the extent to which patients take their medications as prescribed by their healthcare providers. Poor adherence is a common issue that can lead to inadequate disease control, increased healthcare costs, and higher utilization of healthcare services. Various factors contribute to non-adherence, including forgetfulness, medication side effects, complex dosing schedules, lack of understanding of the importance of medication, and socioeconomic barriers[2].



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A thorough understanding of medication adherence among patients with chronic illnesses is essential for healthcare professionals, policymakers, and researchers. It helps identify barriers to adherence, develop targeted interventions to improve adherence, and ultimately enhance the effectiveness of chronic disease management strategies. Despite the recognized importance of medication adherence, comprehensive assessments are still needed to understand the reasons for non-adherence, evaluate adherence rates, and explore the impact of adherence on clinical outcomes in different chronic illness populations[3].

This review aims to provide insights into medication adherence among patients with chronic conditions by analyzing relevant research, assessing adherence rates, identifying factors influencing adherence [4], and discussing the implications of these findings for healthcare practice and policy. By highlighting this critical aspect of chronic disease management, the review seeks to contribute to ongoing efforts to optimize patient outcomes and reduce the burden of chronic diseases on individuals and healthcare systems [5].

## Methodology

## **Study Design:**

A cross-sectional study was conducted among patients with chronic diseases in Narasaraopet. Participants were randomly selected and approached via an electronic questionnaire[6].

## **Study Site:**

Government Hospital, Narasaraopet.

## **Study Period:**

6 months.

## **Inclusion Criteria:**

- Adults (men and non-pregnant women) over 18 years of age.
- Patients with chronic diseases taking both prescribed and over-the-counter medications[7].
- Attendees of primary care services in Narasaraopet.

## **Exclusion Criteria:**

- Individuals unable to provide informed consent.
- Pregnant women.
- Patients with concomitant serious medical or surgical conditions requiring hospitalization.

## **Statistics:**

Responses from the patients will be analyzed using SPSS software[8].

#### **Results and Discussion**

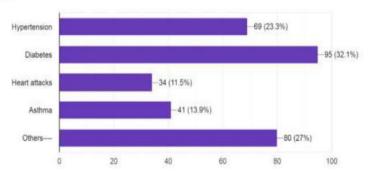
As illustrated in the graph and chart above, approximately 10.1% of participants did not regularly follow up with a primary healthcare center. Additionally, 44.3% reported having forgotten to take their medications in the past. Despite this, the majority of participants (55.1%) stated that they took their medication as instructed by their doctor or pharmacist, and 62.8% reported taking their medications on time[9]. Furthermore, 76.4% of participants mentioned that the pharmacist explained the method and instructions for using the medications. However, 65.5% of participants felt that the quantity of medications they were prescribed was excessive[10].



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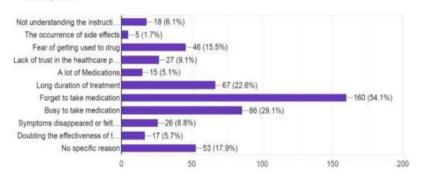
What disease do you suffer from (you can choose more than one option, if any)? 296 responses



GRAPH-1

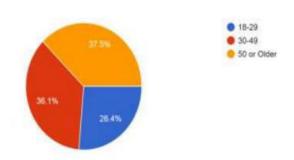
If you are "Not adhered" to taking medications correctly, what are the reasons for that? (You can choose ore than one option, if available)

296 responses



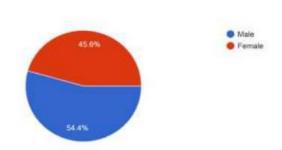
GRAPH-2





PIECHART-1: Age wise distribution

Sex 296 responses



PIECHART-2: Gender wise distribution



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## **CONCLUSION**

Non-adherence to medication is a significant issue affecting both patients and the healthcare system. Barriers to adherence encompass factors related to the patient, healthcare provider, and the healthcare system, often interconnected. Addressing these barriers on an individual patient basis and implementing tailored strategies are crucial steps towards improving medication adherence. Patient education and motivation are pivotal in enhancing adherence rates. Healthcare professionals must devise practical strategies within their practices to promote medication adherence, thereby improving therapeutic outcomes. Further research is essential to continuously monitor medication adherence and identify contributing factors, enabling the development of effective strategies to enhance medication adherence.

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