An Observational Study on Medication Adherence in Patients with Common Illness

K.Yogendra¹*, A.Charishma², K.Ruchithapriya³, J.Nagaraja⁴,

Dr.M.Prasada Rao⁵

^{1,2,3,4,5}(Pharmacy Practice Department,M.A.M College of pharmacy,India) Corresponding author:K.Yogendra

Abstract:

Objective: To find out the medication adherence rate of Chronic diseases at rural areas around Narsaraopeta among 18 - 87 years of age group. **Method**: Door to Door Survey was conducted at rural areas aroundNarsaraopeta. Eight hundred and twenty patients (N=820) participated in the study. The Questionnaire in Morisky Medication Adherence Scale (MMAS) was used to identity adherence rate in adults. **Results**: 3.2 % of patients were highly adherent , 25.8% of patients were moderately adherent, 71.1 % patients poorly adherent were identified and it revealed that there is prevalence of poor medication adherence. There was no statistically significant difference among genders. **Conclusion**: The study concluded that there is prevalence of low adherence suggests a necessity of clinical pharmacist for creating awareness.

Keywords: Chronic diseases, MMAS, Prevalence, Clinical pharmacist, Awareness.

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I. INTRODUCTION

Poor medication adherence is commonly observed in the adult patients with chronic illness. Medication adherence refers to the acceptance of patient with the recommendations agreed from a health care provider. In general the health care use contribute to non-adherence includes excess use of emergency care and hospitalizations for complications which are preventable, it represents avoidable costs there by reducing health care spending. As non-adherence can be monitored and enhanced , medication adherence promoting efforts have begun to focus on improving health status of patients , resulting in programs that effectively reduced health care costs.

II. METHODOLOGY

Participants: This is cross sectional study-survey design. Door to door survey was conducted by using Morisky Medication Adherence Scale Questionnaire. Eight hundred and twenty (n=820) adults were participated in the study. Both men and women between the ages of 18-87 years (Mean age= 56.073 years with standard deviation of 17.069 years).

III. INSTRUMENT USED

Morisky Medication Adherence Scale (MMAS-8):

Morisky Medication Adherence Scale has a questionnaire which is a self report measure and used to identify medication adherence rate . Patients are asked to answer the questionnaire relating to the medication activity. This questionnaire provides a standard method to analyse a patient's coordination in everyday functional activities. It consists of 8 items, which group into eightdistinct factors. It takes about 15-20 minutes to complete. Statistical tool used to calculate the percentage of patients giving each response from total number responding to each question. Continuous variables compared between groups using student t test and ANOVA and categorical variables were compared by using the chi-square test. A p value of $<0.0^{\circ}5$ was considered significant.

Data collection procedure:

The necessity of the study was precisely explained to panchayat head and collected details about population and overall required information. Door to door survey was conducted at rural areas around Narsaraopeta, Guntur district and consent forms were obtained from patients. The Morisky Medication Adherence Scale Questionnaire (MMAS-8) was distributed and explained the details and clarifies their queries. Data was collected and recorded for further analysis.

IV. RESULTS

Eight hundred and twenty adults (n=820) were participated. The age range was 18 years to 87 years. Descriptive statistics was done to analyse the data. Morisky medication adherence scale (MMAS-8) is used to measure the medication adherence in adult patients with chronic illness . In, this study Morisky medication adherence scale of 8 questionnaireis used. Morisky medication adherence scale is interpreted as score less than 6 is said to be low adherence, score 6 to 8 is medium adherence and score 8 is high adherence. In the study population 583 patients have low adherence, 211 patients have medium adherence and 26 patients are having high adherence.

Age	Total	<6	6-8	8	Non Adherence
interval(years)	sample(N=820)	(Lowadherence)	(Moderate	(High	rate (%)
			adherence)	adherence)	
18-27	58	23	29	6	89.6%
28-37	79	36	39	4	94.9%
38-47	112	59	48	5	95.5%
48-57	164	112	50	2	98.7%
58-67	149	127	18	4	97.3%
68-77	186	158	24	4	97.8%
77-87	72	68	3	1	98.6%
(18-87)	820	583	211	26	96.8%

Table: The Medication non Adherence rate among the age group of 18-87 years

V. DISCUSSION

Poor medication adherence was the condition commonly observed in illiterates, adults, children, rural people. The current research found out that there was poor medication adherence in the rural areas. So as the country like India is a developing country there is a need for the development of the patient adherence. Medication adherence is the one which plays a vital role in increasing patients life expectancy, quality of life, reducing the further complications, reducing the medication cost. Results clearly depict that 583 patients have low medication adherence. This indicates that there was a immediate need of the patient counselling and awareness campaigns.

VI. CONCLUSION

This clearly indicates poor medication adherence rate in rural people. There is a immediate need for the patient centred clinics and Clinical pharmacist to be employed to counsel and educate the rural people. Government should take an initiative and provide the job for the clinical pharmacist in order to uplift the rural life.

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