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Original Article

ASSESSMENT OF PATIENT'S KNOWLEDGE REGARDING DISPENSED MEDICATION IN A SOUTH INDIAN GOVERNMENT HOSPITAL

S. ASMA UMIRA*, MALLESH M, M. DIVYAJA, DIVYA SREE

Department of Pharmacy Practice, P. Rami Reddy Memorial College of Pharmacy, Kadapa, AP 516003
Email: assu2595@gmail.com

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ABSTRACT

Objectives: Patient's knowledge regarding medication dispensed to them is an important factor for the proper use of medicines and their well-being, improving the patient's knowledge, suggesting them with rational ideas on proper usage of medicines yields better results in patient health status.

Methods: A direct observational study was conducted in Rajiv Gandhi Institute of Medical Sciences a south Indian government hospital using the specially designed questionnaire.

Results: Out of 167 cases highest prescribed class of drugs were anti ulceratives (65.2%), followed by NSAID's (63.4%), antifungals were the least (0.59%) prescribed, Out of 167 patients 58% patients were identifying medicines through colour, shape, size of the tablets and syrups, only 42% were able to identify through names, 67% are willing to stop medicines if they feel better without following the physician advice, 71.4% don't even know what drugs have been prescribed for what condition, 64.8% believing that the drugs as a magical remedies for any sort of disease, 43% patients suggesting the same prescription to their intimates, only78.3% of patients said that they discuss the drug effects with physician and 79.5% review the physician frequently, apart from this 86.7% feel that the drug information is essential for their better health.

Conclusion: Wide range of illiteracy and low economic status are playing vital role in the patient's knowledge and usage of drugs by the patients if there is a growth in the literacy rate the circumstances may modify healthier.

Keywords: Patient's Knowledge, Medication, Clinical Pharmacist.

INTRODUCTION

Patient's noncompliance towards drug regimen relies on inadequate knowledge of patients regarding medicines they have been prescribed with, which leads to overdose or misuse of medication which further results in serious outcomes like early discontinuation of antibiotics often results in microbial resistance and/or treatment failure 1. In developing countries the findings on patient knowledge regarding their medicines are diverse, may be due to the variations in literacy levels and dispensing attributes noted from study to study.

Findings in India, Western Nepal and Cambodia had revealed the patient knowledge of dispensed drugs were 64.5%, 81% and 55% correspondingly [2-4]. World Health Organisation (WHO) issued that more than 50% of all medicines prescribed worldwide were dispensed or sold in appropriately in 2002; with 50% of them unsuccessful in taking medicines correctly [5]. Generally each medicine label must include name of the medicine, route of administration, dosage, name of patient, date of prescription, name of the clinic or the hospital and special instructions, if any.

The purpose providing this information is to make ensure that prescribed medicine can be identified and described which can contribute to ideal therapeutic outcomes[6]. But, studies from some developing countries had shown that normally quality of labeling of medicines dispensed are inadequate andmoreover43.8% and 1.4%of prescriptions dispensed in India and Western Nepal respectively were inadequately labeled [2, 3].

The present study is aimed to assess the patient's knowledge regarding dispensed medication and their administration issued in a south Indian government tertiary care teaching hospital(Kadapa), as it is a government setting with free issue of medicines most of the rural residents come here for treatment, maximum of them are illiterate and those who are with literacy limited to primary education hence there is a need to measure their knowledge of their medicines identification, administration and taking behavior, there by to provide them with proper suggestions in improving their attitude towards medicines.

MATERIALS AND METHODS

Study design

Observational Study

Study period

December 2013 to January2014 (1 month)

Study population

167 subjects

Study place

RIMS, an 800 bedded tertiary care teaching hospital, Kadapa.

Department

Patient Counselling Center

Study materials

Patients Prescriptions, Questionnaire to assess the patient knowledge about medication (specially designed).

Methods

Patients were interviewed to assess the knowledge for their prescribed medication using a specially designed questionnaire, later they were counselled and provided with the required information regarding their medication by the clinical pharmacist.

RESULTS AND DISCUSSION

A total of 167 patients were interviewed during the study, of which, 32.9% (n=55) were males and 67.1% (112) were females from different departments fig. No. 1 indicating that the female population are more prone to illness than males which correlates with the less priority given to females in the nutrition and care off their health.

Out of 167 most (28.01%) of the patients were under age group of 20-30 years (young adults) and least (1.79%) were 70-80 years (geriatrics), table 1 furnishes the details of distribution of patients according to age.

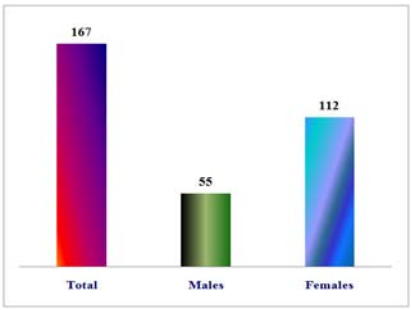

Fig. 1: Total Number of Subjects

Table 1: Patients distribution based on age

S. No.	Age (years)	N (167)	Percentage (%)
1	10-20	11	6.58
2	20-30	47	28.01
3	30-40	30	17.96
4	40-50	35	20.95
5	50-60	22	13.17
6	60-70	19	11.37
7	70-80	3	1.79
8	80-90	0	0

The literacy rate was poor as the half of the patients (52.09%) interviewed were illiterates and in the patients with literacy, primary education rate (29.34%) was high and 9.58% patients with secondary education and graduated candidates limited to 8.98% Table 2 indicating that the literacy levels are poor in the rural areas even in the recent years.

Table 2: Patients distribution based on literacy rate

S. No.	Education	N (167)	Percentage (%)
1	Primary	49	29.34
2	SSC	16	9.58
3	Graduation	15	8.98
4	Illiterates	87	52.09

Of 167 patients only 16 (9.51%) were employed, 61 (36.52%) were daily labourers and most (90) of them were unemployed (53.82%), Table 3.

Table 3: Patients distribution based on employment

S. No.	Occupation	N (167)	Percentage (%)
1	Employee	16	9.51
2	Unemployed	90	53.82
3	Daily Labour	61	36.52

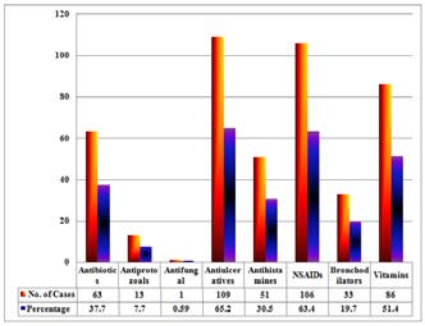

Fig. 2: Different classes of medicines prescribed to the patients

Of 167 cases highest prescribed class of drugs were anti ulceratives109cases (65.2%), followed by NSAID's in 106 cases (63.4%), antifungals were the least (0.59%) prescribed class of drugs, vitamins took the third position 86(51.4%), surprisingly antibiotics 63(37.7%) were next to vitamins, second least prescribed drugs were antiprotozoal drugs13 (7.7%), fig. 2 gives the details of the different classes of drugs prescribed.

While interviewing the patients regarding the medication use depending on their symptoms, 40% of patients answered to increase the dose if the symptoms delay to subside, 34.6% increase the dose to relieve soon from the symptoms, surprisingly 67% of them stop taking medications if they feel better without concerning the physician's prescription course.39.4% reported that they stop taking medications when they feel worse and 34% reported that they take the same prescription if the symptoms revert fig. 3

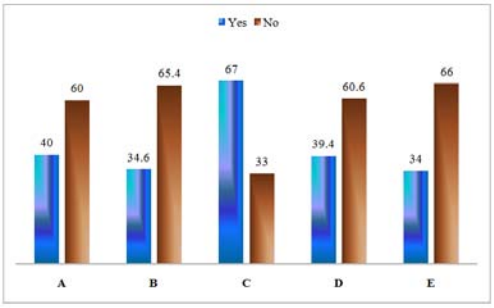

Fig. 3: Patient's attitude towards medication based on the Symptoms

1. Do you increase the dose if the symptoms delay to subside?
2. Are you increasing the drug dose to relive soon from the symptoms?
3. If you feel worse while taking the medicine, do you stop taking it?
4. Sometimes when you feel better, do you stop taking medicine?
5. If the symptoms revert, do you take the same prescription which has been prescribed in the past?

To assess the knowledge of patients about side effects of drugs following questions were interviewed of which 32.8% totally forget to take the medications while 44.2% were careless about their medicines. 32.8% & 41.8% don't know the complications and long term effects of drugs respectively. Noting factor, 78.3% of patients said that they discuss the drug effects with physician in contrast to their illiteracy rate fig. 4.

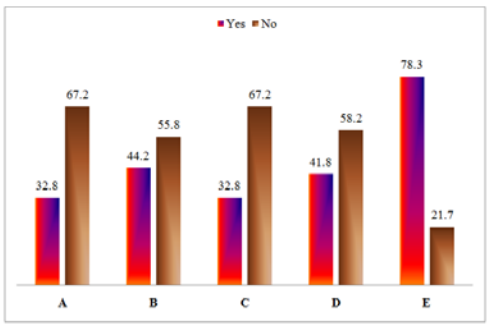

Fig. 4: Patient's knowledge about the effects of medicines

1. Do you ever forget to take your medicine?
2. Are you careless at times about taking your medicine?
3. Do you know about the complications of missing the dose?
4. Do you know about the long-term effects of taking medicines?
5. Are you discussing the drug effects with your doctor?

85% of the patients were aware of their disease but only 26.8% know what the treatment is being given to them. Furthermore only

20.2% know the names, 28.6% know the indications and 13.6% know the strengths of the medication, only 77% know the route of administration of their medicines, 60.4% had idea about the frequency of the medication. 46% depend on others to identify their medications and 43% patients willing to suggest the same prescription to their intimates if they are suffering with the same condition, reflecting the unawareness of the patients towards medication usage fig. 5. It is a spectacle to hear that about 64.8% think that drugs are the magic remedies fig. 6.

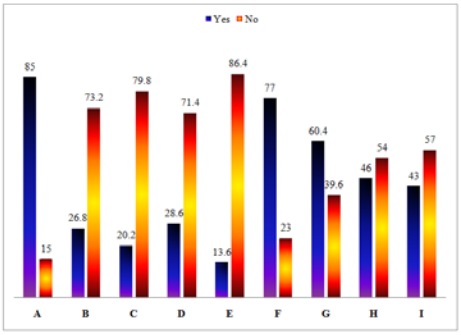

Fig. 5: Patient's knowledge regarding their disease and medication

A. Are you aware of your disease?
B. Do you know about the treatment of your disease?
C. Do you know about the names of your medication?
D. Do you know the indications of your medications?
E. Do you know about the strengths of medication?
F. Do you know about the route of administration?
G. Do you know about the frequency of your medication?
H. Are you depending on others to identify your medications?
I. Are you suggesting the same prescription to your intimates with same condition?

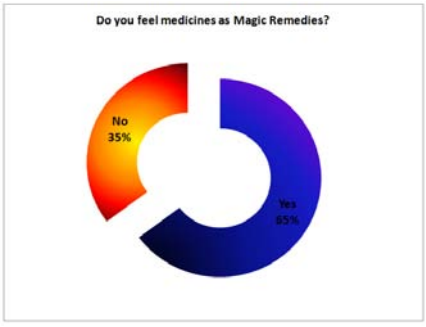

Fig. 6: Patient's feelings about the medicines

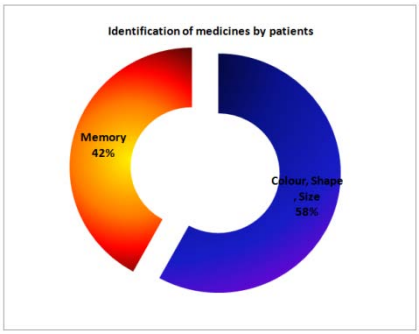

Fig. 7: Identification of medicines bypatients

58% patients were identifying through colour, shape, size of the tablets and syrups which they had been prescribed and only 42% were able to identify through memory (name)clearly reflecting the effect of illiteracy fig. 7.

Patients were also interviewed about their communication with the physician, only 25% were willing to get the different brand drugs other than the doctor prescribed but remarkably 79.5% patients review the doctor regularly fig. 8.

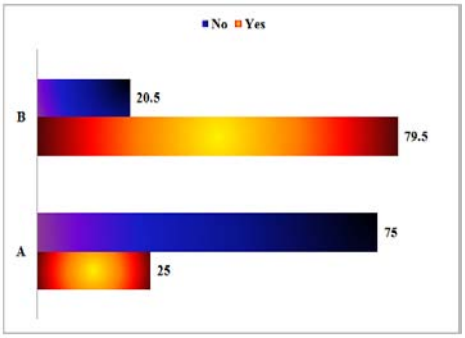

Fig. 8: Patient's attitude towards doctor's advice

A. Are you willing to get different branded drugs other than doctor prescribed?
B. Do you regularly review your doctor?

Finally we probed the opinion on the drug information which we have provided to them, only 78.9% were willing to know the information about the drugs prescribed and 86.7% feel that the drug information is essential for their better health fig. 9.

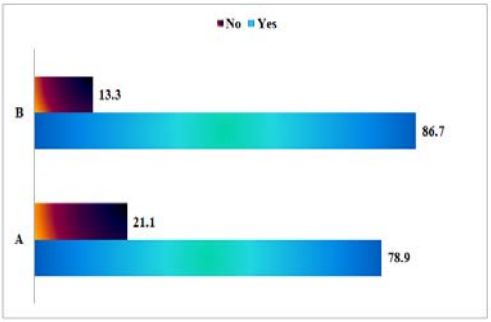

Fig. 9: Patient's overview on the study

A. Are you willing to know information about the drugs you prescribed?

B. Do you feel that all the above information is essential for your better health?

CONCLUSION

The present study concludes that the patients are not having the elementary knowledge about medications,most of them not following the physician's advice and discontinuing medications on their own if they feel better and thinking that drugs are magic remedies for their health. This circumstancemay perhaps due to lowliteracyrate of rural areasand deficiency of proper hospital arrangements. Giving information to the patients regarding the drugs and explaining through special devices, pictograms, charts etc may help in improving the circumstances. Wide range of illiteracy and low economic status are playing vital role in the patient's knowledge and usage of drugs by the patients if there is a growth in the literacy rate the circumstances may modify healthier.

CONFLICT OF INTERESTS

Declared None.

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