

EVALUATION OF PREVALENCE OF PATIENTS NONCOMPLIANCE IN DEHRADUN**ANJU NEGI^{1*}, YOGESH BARSHILIYA², S. SINGH²**

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ABSTRACT

Patient non-compliance means the fault of the patients and in appropriate use of the medicines. Patients fail to obey instruction given by health care team. The major problems related to patients noncompliance are progressive worsening of the condition treated and other health hazards like adverse effects. Present study was conducted to evaluate the prevalence of noncompliance in Dehradun (Uttaranchal). Total 500 patients were interviewed by using a self prepared data collection form. The study revealed that 75% patients were noncompliant. Among the various reason of noncompliance, the most common were forgetfulness (32%), patients discontinued medicine when feel better (36%), cost of medication (21.34%), poor understanding (5.33%) and another reason of noncompliance includes self medication, overdosing, multi- drug therapy etc. The results indicated that although a good socioeconomic profile of people in Dehradun the rate of patient noncompliance is very high. The patients have less exposure to health awareness; this problem can be overcome by the help of clinical pharmacist who guide the patient about the proper use of medication and other factor related to it.

Key words: Patient noncompliance, Adherence, forgetfulness, self medication, multi drug therapy.

INTRODUCTION

Patient compliance is the extent to which a patient takes or uses his medicine in accordance with the directions or follows the general health advice given by his doctor. It also can be defined as "Adherence to prescriber's instruction by the patient." Patient compliance is a major determinant in the success of medical therapy. Without compliance therapeutic goals cannot be achieved, resulting in poorer patient outcomes.¹

Studies conducted in the USA have shown that 125,000 people a year die from not following their prescriptions correctly. From 33-69% of hospital admissions and 23% of nursing home admissions are the direct result of patient noncompliance. One million hospital admissions each year, in addition to increased antibiotic resistance, are believed to be due to poor patient compliance. Hospitalization costs come to around \$13 billion.¹

Patient noncompliance means the fault of the patient and inappropriate use of the medication. The patients fail to obey instructions given by health care team. The major reason of noncompliance are forgetfulness, poor report with physician, few symptoms, chronic illness, prescription not collected or not dispensed, purpose of treatment not clear, perceived lack of effect, real or perceived side effect, instruction for administration not clear, physical difficulty in complying, unattractive formulation, complicated regimen and cost of therapy. The major consequences of

noncompliance are under utilization or over utilization of medication and improper technique of administration or consuming outdated medication; this may lead to progressive worsening or other complicated condition being treated, adverse reaction or drug abuse, poisoning or even death etc.^{2,3}

Methods of improving patient's compliance:^{1,2,4}

1. Identification of risk factors: it must be taken into account in planning the patient's therapy so that a simplest regimen which is compatible with the patient's normal activities can be developed.
2. Development of treatment plan: plan should be individualized on the basis of the patient's need. The more complex the treatment regimen, the greater is the risk of noncompliance.
3. Patient education: it plays very important role in improving the patient compliance by providing information to the patient on safe and effective use of drugs.
4. Special programs and devices: psychiatric rehabilitation program and training in medication self management occurred in four skill areas:
 - i. Obtaining information about the benefits of antipsychotic medication.
 - ii. Knowing how to self administer the medication correctly and evaluate its effects.
 - iii. Identifying adverse effects of medication.
 - iv. Negotiating medication issues with healthcare providers.
 - v. Patient motivation.

Role of pharmacist in improving patient compliance:⁴

Pharmacist have an important and growing role in patient compliance; so, he /she as a healthcare professional may educate patient about how to take or use the medicines, effect and possible side effect of medication, precaution and warning, duration and time of use, when to seek professional advice etc. pharmacist should make positive impact on patient treatment plan, deliver medication and monitoring services and participating in health risk prediction.

METHODOLOGY

The patient noncompliance was analyzed through a proper observational study conducted in various hospitals of Dehradun. A total of 500 patients were interviewed randomly by using a questionnaire or self prepared data collection form. The prescriptions were analyzed while putting questions about their adherence to the prescribed medication and to know the reason of noncompliance. The questionnaire includes questions on demographic details, knowledge of drug therapy and indirect questions related to adherence to the treatment regimen. The questionnaire was prepared in English but it was translated to local language (Hindi) wherever required. The questions were asked properly in a sober way so as to identify noncompliant patients.

RESULT

During the study, 500 patients were interviewed. Study revealed that 25% of patients were fully compliant and 75% were noncompliant.

Table 1: Gender wise distribution of noncompliant patients

Gender	No. of Patients	Percentage (%)
Male	175	46.67
Female	200	53.33
Total	375	100.00

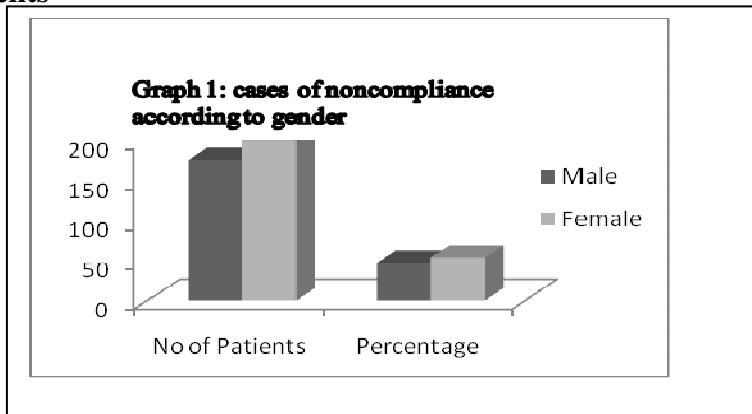


Table 2: Age wise distribution of noncompliant patients

Age group (year)	No. of Patients	Percentage (%)
< 20	60	16
20-40	185	49.33
41-60	105	28
>60	25	6.67
Total	375	100

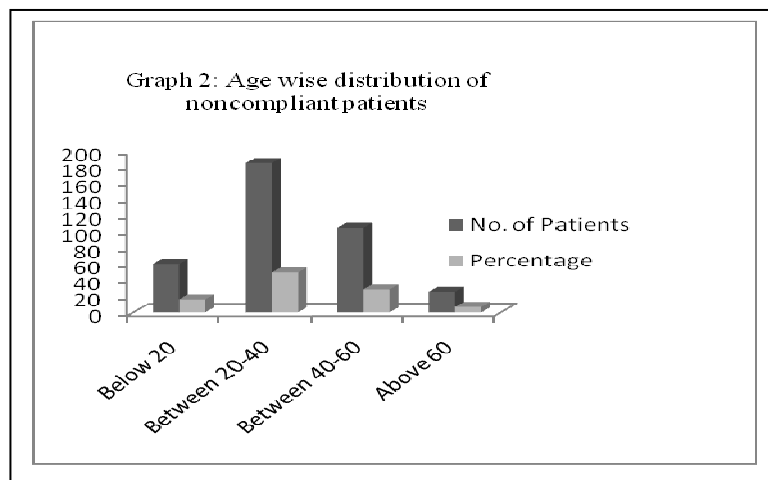


Table 3: Various causes of noncompliance

Causes	Number of patients	Percentage (%)
Cost of medication	80	21.34
Unable to read	20	05.33
Feel better	135	36.00
Side effect of the drugs	20	05.33
Forgetfulness	120	32.00
Total	375	100.00

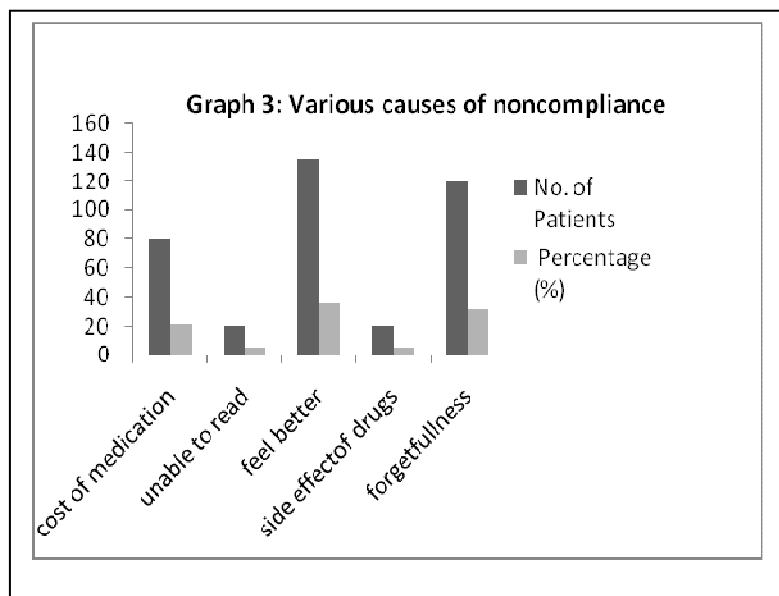
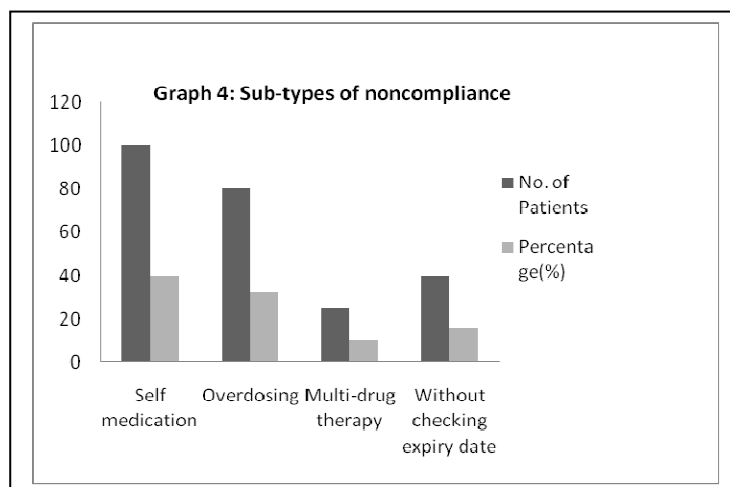


Table 4: Sub-type of noncompliance

Causes	No. of patients	Percentage (%)
Self medication	100	40.83
Overdosing	80	32.65
Multidrug therapy	25	10.20
Without checking expiry date	40	16.32



DISCUSSION AND CONCLUSION

A total of 500 cases have been analyzed. Out of these 46% were male and 54% were female. The objective of the study was to evaluate noncompliance amongst patients in Dehradun and the major reasons leading to it. Our study revealed that majority of patients was noncompliant. The main reasons of noncompliance were:

- Cost of medication
- Unable to read the instructions
- Forgetfulness
- Poor understanding of instruction
- Associated side effects
- Discontinue medication when feel better or premature discontinuation of therapy

Clinical pharmacist may participate in all stages of the medication use process, including drug ordering, transcribing, dispensing, and administering and monitoring. A clinical pharmacist has to play an important role in improving patient compliance by effective patient counseling. Pharmacist, with the excellent communication skills conveys the relevant information about name and indication of drug, dose and duration of therapy, possible side effects of the drug and strategies to overcome the side effects, possible interaction with other drugs, food and disease and advice the necessary steps that should be taken to overcome these interaction; with reference to the present study, it is concluded that in Dehradun the patients have less exposure to health awareness and this result in high incidences of noncompliance. This problem can be overcome by the help of clinical pharmacist who can guide the patient about the medication and its side effects. He also advice them to strictly adhere to the drug therapy and by this way, we can improve the patient compliance in future.

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