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**RESEARCH ARTICLE**

# Prescribing Trend of Private Consultants at Hyderabad, Pakistan.

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## *Abstract*

To find out the drug prescribing trend by the consultant in a private hospital at Hyderabad, Pakistan, the purpose of study was to collect 400 prescriptions from the hospital's pharmacy with in the time frame of 60 days. Among the total number, 36.75% of prescriptions were found with more than four drugs in a prescription. Information related with consultant and patient was consistently incomplete. The patient's name, gender/sex, and age were absolutely absent in 33.75%, 46.25%, and 55.75% of Rx, respectively

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## Introduction

Wrong prescribing may leads to unsuccessful and unsafe treatment. However, persistent chances of infection, illness and harm to the patient with respect to higher costs are also the considerable factors.**[1].** In the Hyderabad Pakistan, the facilities of medical care are provisioned mostly to overall citizens of the country from the most important basic health care centers. Patient's achievement is the entrance in secondary and tertiary care hospitals situations through recommendation from most important health care centers. Rational drugs selection in a prescription is one of key subjects in a number of studies **[2].** WHO accumulated a scheduled of essential indicator for medicine use that are beneficial because indicating different patterns of prescribing the medication in the health-care accommodations **[3, 4, and 5].** A perfect prescription must carry all the essential information, such as age, weight and gender of patients respectively. However, this study highlights the prescription issued at a private hospital that covers all medicinal specialties, at Hyderabad, Pakistan. However, clarification of drug-prescribing patterns is also important to improve prescribing criteria, provide best health care, and up gradation of the normal drug therapy. A huge amount of information about ℞ medicines used in the community is accessible from the pre designed parameters thorough out the world, where therapeutic classification is advanced in terms of medical-record keeping**.[5]** considerable reasons exist regarding the lack of information about the drugs, un-ethical drug promotions and unreasonable prescribing behaviors of prescribers. Observing the prescriptions and drug consumption studies which can classify the complications and provide response to prescribers so as to make a realization about unreasonable use of drugs [6].
In Order to evaluate the prescribing performance of specialist & doctors, as well as to classify areas where further improvement is required in terms of communication between doctors and pharmacists for rational drug selection and its utilization among the patients in order to decrease possibility of medication errors and to attain successful therapeutic Outcomes.

### 1) Methodology

This was a prospective study that was carried out between May 2013 to August 2013. During this period,400 prescriptions were gathered from a private hospital of Hyderabad, Pakistan by random sampling technique. The prescription (℞) were exposed to analyze by using the WHO drug use indicators [3].In every single ℞, the lack of information about patient, prescriber and the suggested drugs were analyzed. Patient's information studied contains

age, gender, and diagnosis as well as a history of allergy. Facts concerned to signature of prescriber and address with respect to different parameters of ℞ such as dose, frequency, route and number of drugs being prescribed. Results are exposed in the form of percentage for present indicators of all number of prescriptions.

## Results

Out of total 400 prescriptions, the name of patient was mentioned only in 66.25%, while Age 53.75%, Sex 44.25%, Address 34.25%, Diagnosis 49.75% and History of allergy 24.75%, which are also shows in Table 1.

While table 2 shows that the prescriber information availability on prescriptions i.e 55.75% of the total prescriptions have name, while 65.25% of the prescriptions were not contained with signature of the prescriber. However, on 88.25% of the prescription the license number of prescriber has not mentioned, while the other information also specified in Table 02.

The dose of the prescribed drug and the route and frequency of administration were present in 74% and 64.75% of prescriptions respectively. Whereas, duration of treatment was mentioned only in 40.25% of prescriptions (Table 3), Table 4 shows about the number of drugs being prescribed to a patient's i.e one, two, three, four or more than four drugs per prescription in 6.25%, 10.25%, 17.25%, 29.5% and 36.75% respectively. The most commonly prescribed classes of drugs are shown in Table 5 i.e mostly prescribed non-steroidal anti-inflammatory drugs 26.5%, then antihypertensive drugs 24.5%, antiulcer drugs (23.75%) and others are also shown in table 5; with this 52 % of the prescriptions were not readable by pharmacist. Out of 400 prescriptions, 375 ℞ were prescribed with respect to their brand names. However only 25 ℞ were prescribed with their generic names.

**Table No: 01: Patients Information Description in total prescription**

| Patients Information | Present | Absent |
|---|---|---|
| Name | 66.25% | 33.75% |
| Age | 53.75% | 46.25% |
| Sex | 44.25% | 55.75% |
| Address | 34.25% | 65.75% |
| Diagnosis | 49.75% | 50.25% |
| History of Allergy | 24.75% | 75.25% |

**Table No: 02: Prescribers Information Description in total prescription**

| Prescriber Information | Present | Absent |
|---|---|---|
| Name | 55.75% | 44.25% |
| Signature | 34.75% | 65.25% |
| License Number | 11.75% | 88.25% |
| Address | 72.25% | 27.75% |

**Table No: 03: Prescribed Drug Information in total prescription.**

| Prescription Information | Present | Absent |
|---|---|---|
| Dose | 74% | 26% |
| Frequency of Administration | 64.75% | 35.25% |
| Duration of treatment | 40.25% | 59.75% |

**Table:04 Frequency of Prescription in Percentage**

| Prescribed Drug | Frequency of Prescription in Percentage |
|---|---|
| One Drug | 6.25% |
| Two Drug | 10.25% |
| Three Drug | 17.25% |
| Four Drug | 29.5% |
| More than Four Drug | 36.75% |

**TABLE NO: 05: Most Prescribing class of drug in total prescription**

| Class of Drug Prescribed | Frequency | Percentage |
|---|---|---|
| Antibiotic | 58 | 14.5% |
| NSAIDS | 106 | 26.5% |
| Antipyretics | 28 | 7% |
| Antiulcer | 95 | 23.75% |
| Antihypertensive | 98 | 24.5% |
| Ant diabetics | 15 | 3.75% |

**Fig 1: Shows Patients Information Description in total prescription**

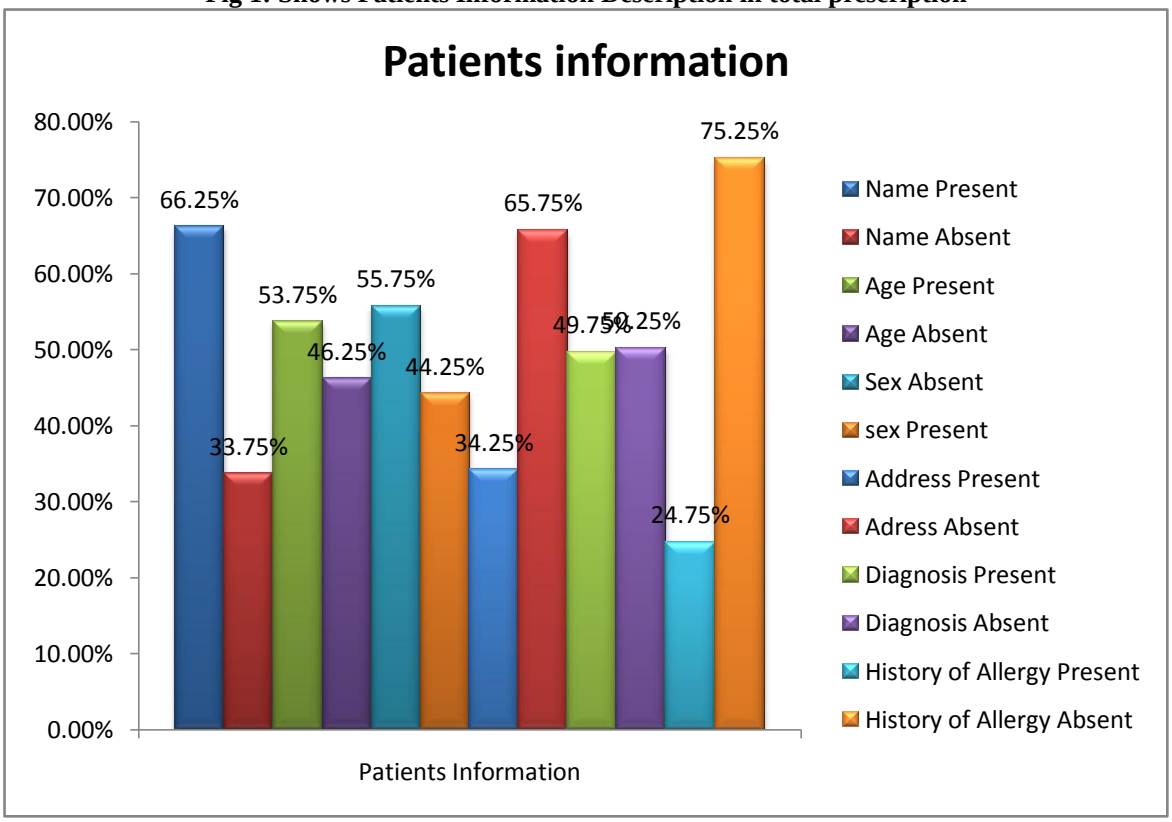


**Fig2 shows Prescribers Information Description in total prescription**

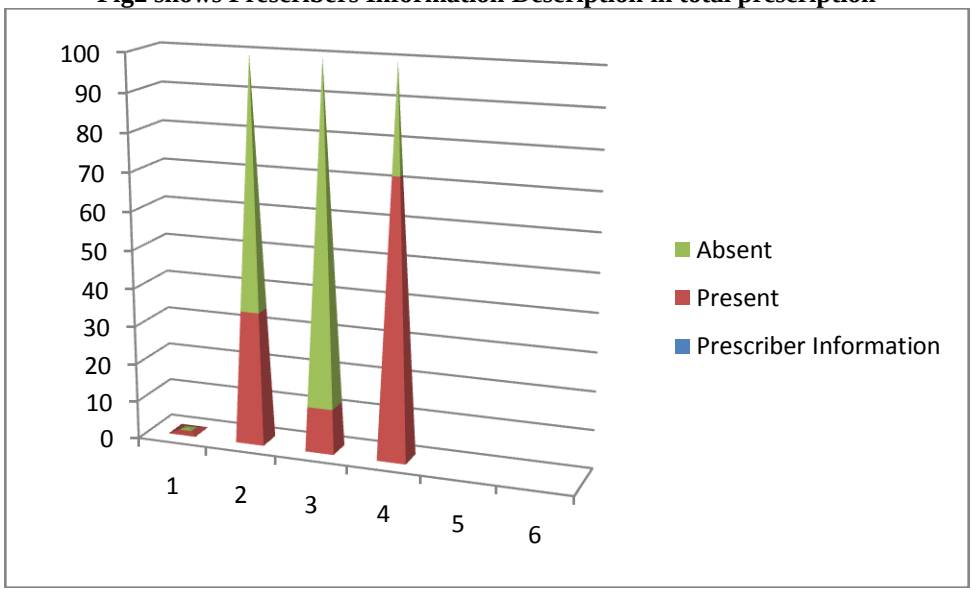



**Fig 3 shows Prescribed Drug Information in total prescription**

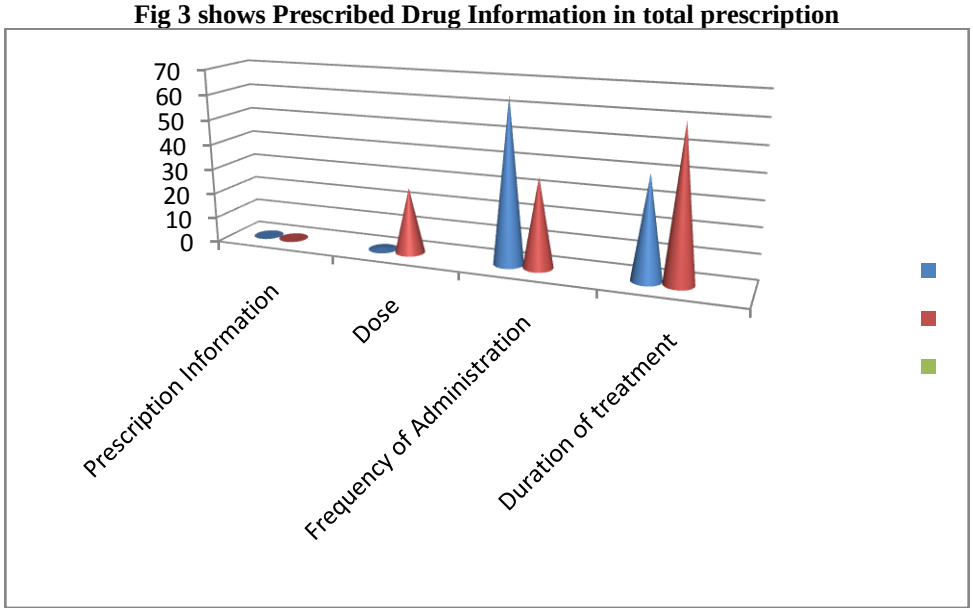


**Fig4 shows Frequency of Prescription in Percentage**

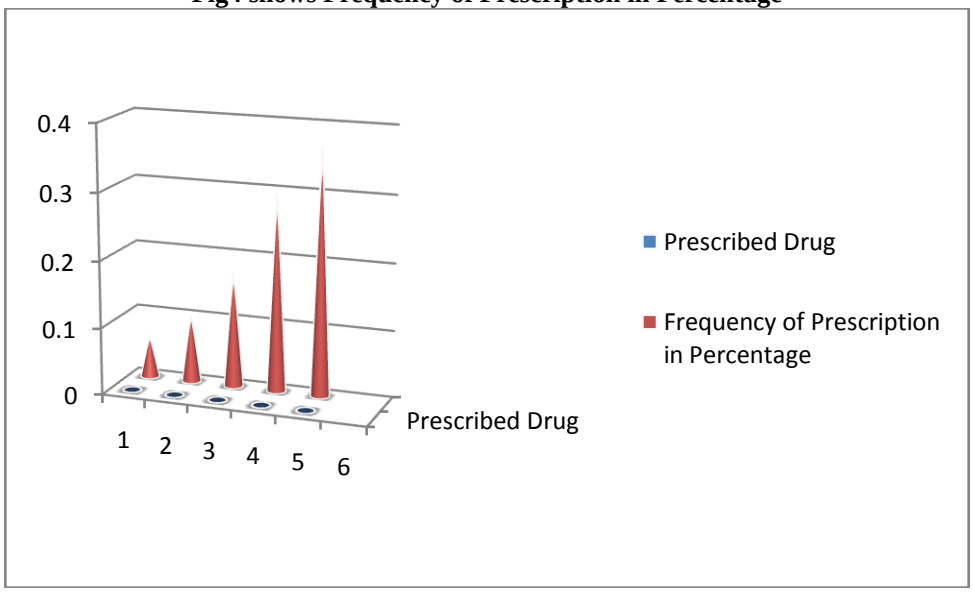
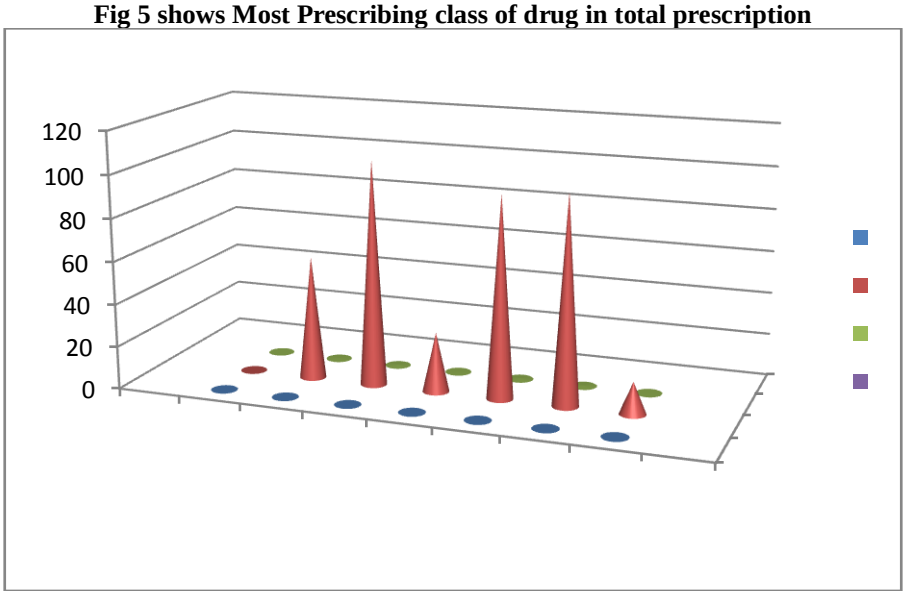



**Fig 5 shows Most Prescribing class of drug in total prescription**




## Discussion:

Prescriptions at different clinical setups entail close supervising and productive addition whenever necessary. Current study directed to classify insufficiencies in trend of writing the prescription and to examine the manner of writing the $R_x$ of consultant. In the current study, poor readability was widespread in more than 50% of the analyzed prescriptions, which is nearly equal to the position in Saudi Arabia (84%) [7].Our outcome apparently demonstrates

the importance for substantial improvement in practices of prescriptions due to a considerable proportion of $R_x$ required the important data. Omitted data encompassed doctor title (absent in 44.25%), signature (in 65.25%), permit number (88.25%), physician's address (27.75%). The name of the patients was missing in 33.75%, age in 46.25%, and gender in 55.75%. Associated with consultants, the address may have been exempted because $R_x$ was handed out in the title and hospital address. The patient's address may be in the clinical notes, but no any help to the pharmacist if he or she willing to directly contact and correct a dispensing mistake after the patient taking the medicine from the pharmacy. The title of the patients is of course having utmost need. Furthermore, because titles are occasionally not given the idea about the sex / gender so by this the pharmacist can verify reasonable selection of pharmaceuticals and dosage forms. The percentage of drugs prescribed by consultants i.e generic title was 6.25%. This is smaller than percentage given in Sudan (19.5%) [8], Saudi Arabia (15.1%) [7], Lebanon (2.9%) [9]. Furthermore, 66.25% of prescriptions in our study comprised four or more than four drugs that are substantially more than described in most Western nations. Prescriptions contained many drugs raises both the risk of different type of interactions with other drugs and the prevalence of harmful reactions. However it may also reduce compliance of the patient. Mostly NSAIDs was the group of therapeutic medication that mostly routinely prescribed i.e 26.5% of total prescriptions, antihypertensive were the second most routinely prescribed (24.5%), and Antibiotic prescription 14.5%, which is remarkably less than described in both eastern and western nations, e.g. Sudan (63%) [10], Iran (61.9%) [11], England (60.7%) [12, 13].

## CONCLUSION

The current study identified regions for additional enhancement to implement the writing of prescription and advises that response through particular conversations and workshops might be an effective interference to carry out normal medication use. ℞ written in hospitals need local observing and effect interference when required. This study targeted to classify insufficiencies in prescribing and to examine the prescribing behavior of specialist & doctors. The prescription is an authorized written instruction that can be used for both against the doctor and the pharmacist in cases associated with prescribing or dispensing errors. In spite of the limits of the current study, which contain the small numbers of ℞ studied; we accomplish that drug prescription practices in private hospitals must be better.

## References:


1) M de Vries, TPG,HelulingRH,Hogerzeil HV, Freste DA. (1994), Guide to Good prescribing. A practical guide W.H.O.

2) Karande S, Sankhe P, Kulkarni M. (2005), Patterns of prescription and drug dispensing. Ind JPaediat. 72(2):117-21.
3) Quick JD, Hogerzeil HV, Velasquez G, Rago L. (2002), Twenty-five years of essential medicines. Bull WHO; 80:913-4.International Network for Rational Use of drugs and World Health Organization. How to investigate drug use in health facilities: selected drug use indicators. EDM Research Series No. 7 [WHO/DAP/93.1]. Geneva: World Health Organization. 1993.

4) Anonymus. Pharmacist, GP blamed for coma. The Guardian 1988: 17 March.
5) Patterns of medication use in the United States 2006: a reportfrom the Slone Survey. http://www.bu.edu/SloneSurvey/AnnualRpt/SloneSurveyWebReport2006.pdf
6) Pradhan SC, ShewadeDG, Shashindren CH, Bapna.IS.(1988), Drug utilization studies. National Med J India, 1 :185-89

7) Irshaid YM, Al Homrany M, Hamdi AA, Adjepon- Yamorah KK, Mahfouz AA.(2005). Compliance with good practice in prescription writing at outpatient clinic in Saudi Arabia.East Mediterr Health J, 11(5,6):922-8.
8) Meyer TA. (2000), Improving the quality of the order-writing process of inpatient orders and outpatient prescriptions. Am J Health System Pharmacy, 57(Suppl.4):S18-2.

9) Hamadeh GN, Dickerson LM, Saab BR, Major SC. (2001), Common prescriptions in ambulatory care in Lebanon. Ann Pharmacother, 35:636-40.

10) Guyon AB, Barman A, Ahmed JU, Ahmed AU, Alam MS. (1994), A baseline survey on use of drugs at the primary health care level in Bangladesh. Bull WHO, 72:265-71.

11) Moghadamnia AA, Mirbolooki MR, Aghili MB. (2002), General practitioner prescribing patterns in Babol city, Islamic Republic of Iran. East Mediterr Health J, 8(4&5):550-5.

12) Majeed A, Moser K. (1999), Age- and sex-specific antibiotic prescribing patterns in general practice in England and Wales in 1996. Brit J Gen Pract, 49:735-6.

13) . Lindbaek M (1999). Influence of prescription patterns in general practice on anti-microbial resistance in Norway. Brit J Gen Pract, 49:436-40.