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A CROSS SECTIONAL STUDY TO ASSESS THE PRESCRIPTION WRITING SKILLS OF YOUNG DOCTORS IN A TERTIARY CARE CENTRE.

Ophthalmology

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KEYWORDS

INTRODUCTION:

Prescriptions are medico legal documents. It is the legal and ethical responsibility of a Doctor to write complete and legible prescriptions.[1] The word prescription comes from Latin word "Praescriptus" meaning to write / to designate/order the use of drug as a remedy. Writing prescriptions is an important part of treating patients as any mistakes done in writing prescriptions can lead to Medication error which may in turn lead to Inappropriate medication use or treatment failure ultimately leading to harm to the patients.

This can be avoided by giving proper training to doctors at the right time about prescription writing to minimize these errors.[2]

Prescriptions can be incompletely written either due to heavy OPD load, emergency cases or due to tendency among doctors to give verbal instructions than to write it down. [3]

Hence, it is important to emphasize on writing prescriptions neatly and legibly and to reduce the medication errors, as prescription writing errors are the commonest form of avoidable medication error and hence there is scope and need for improvement in proper prescription writing.[4]

Prescription writing that results in unintentional, significant reduction in the probability of treatment being timely and effective or increase in risk of harm, is known as a prescribing error.[5]

It is the ethical duty of prescriber to care for the health of the patient and Professional duty towards Pharmacists to ensure drug prescriptions have all the necessary details and are legible and readily identifiable.[6]

OBJECTIVES:

1. To assess prescription writing skills among junior doctors.
2. To educate undergraduates and postgraduates about importance of legible and complete prescription writing.

DATA COLLECTION :[2]

The patients coming to SSIMS & RC, Davanagere were prescribed for their respective illness and these prescriptions were randomly selected during 9am to 5 pm OPD hours from SSIMS & RC pharmacy , irrespective of characteristics of patient, their diagnosis and clinical department. A total of 108 prescriptions written by junior doctors were collected for this study. Only the Prescriptions written by young junior doctors (upto grade of senior resident) were collected and included in the study. Prescriptions written by senior doctors (like HOD, Associate professor and Assistant professors) were not included in the study.

METHODOLOGY:

Sample size: 108.

From SSIMS & RC, Davanagere pharmacy,108 prescriptions written by junior doctors were randomly collected for this study which was prescribed by various departments of SSIMS & RC hospital, Davanagere .These prescriptions were carefully analysed and assessed based on various parameters. The main 3 parameters under which these prescriptions were analyzed were based on patient details, doctor details and Drug details.

Patient Details:

1. Name
2. Age
3. Gender
4. OP/ IP number
5. Date

Doctor's Details:

1. Name
2. Designation
3. KMC registration number
4. Signature

Drug Details:

1. Name
2. Route
3. Dose
4. Frequency
5. Duration
6. Quantity

RESULTS:

A total of 108 prescriptions were carefully analysed for these various above mentioned parameters. Based on this analysis, the percentage of prescriptions containing the various details were tabulated(table 1,2,3).

Patient details and address become important while writing a prescription as it becomes easier to contact the patient in cases of any emergency or wrongly prescribed drugs or dosages. In this study (table 1 and fig. 1), about 97.22% of the prescriptions contained name of the patient which is essential mainly for identification.

Table 1: Number And Percentage Of Prescriptions Containing The Following Patient Details.

PATIENT DETAILS	NAME	AGE	GENDER	OP NUMBER	DATE
NO.OF PRESCRIPTIONS CONTAINING THIS DETAIL	105	26	28	65	49
PERCENTAGE OF PRESCRIPTIONS CONTAINING THIS DETAIL	97.22 %	24.07 %	25.92 %	60.18 %	45.37 %

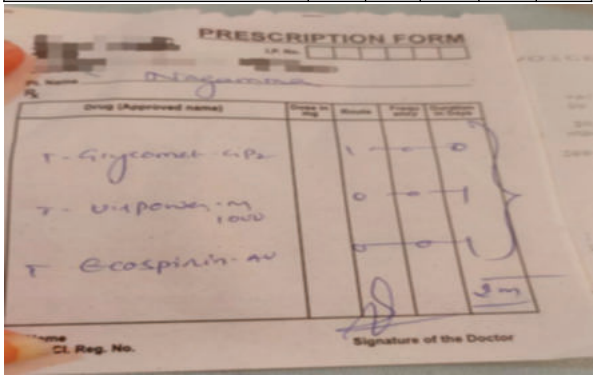

Figure 1: Prescription with missing drug dosage, duration and incompletely written doctor and patient details

About 60.18 % of the prescriptions contained Out patient/ In patient number of the patient. About only 24.07% and 25.92% of these prescriptions contained the age and gender of the patient respectively. About 54.63% of the prescription had missing detail about date. It is important to mention date, as it can lead to problems while dispensing drugs, where the patient can misuse the prescription to buy certain medications multiple times over the counter, which cannot be otherwise issued without the prescription of a doctor.

Table 2: Number And Percentage Of Prescriptions Containing The Following Doctor Details

DOCTOR DETAILS	NAME	DESIGNATION	KMC NUMBER	SIGNATURE
NO. OF PRESCRIPTIONS CONTAINING THIS DETAIL	61	37	40	104
PERCENTAGE OF PRESCRIPTIONS CONTAINING THIS DETAIL	56.48%	34.26%	37.03%	96.29%

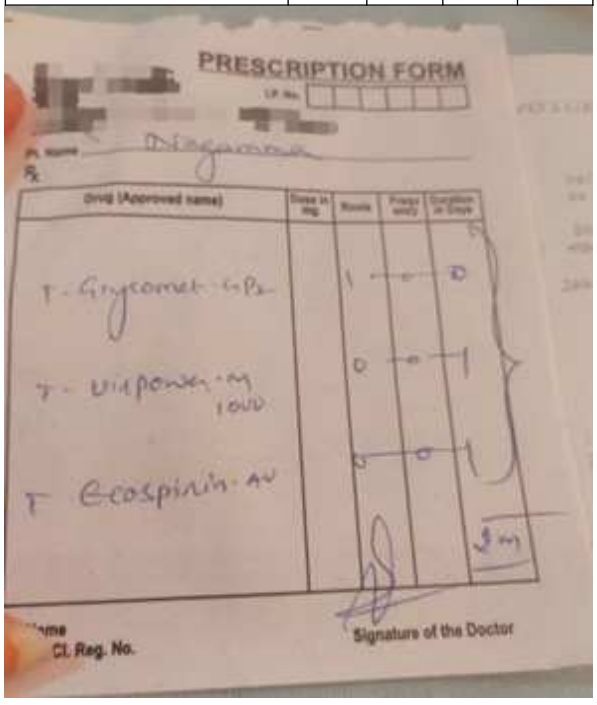

Figure 2: Prescription With Completely Missing Doctor And Patient Details.

Another essential Parameter to be mentioned in Prescriptions is the details about the prescribing doctor (table 2 and fig.2). Almost 96.29% of these prescriptions had signature of the doctor which ensures it was prescribed by a registered medical practitioner. But still it becomes important to mention about the name, designation and KMC number of the prescribing doctor. Name of the doctor was missing in 43.52% of the prescriptions. The designation and KMC number of the prescribing doctor was missing in 65.74% and 62.97% of these prescriptions respectively. In most of these prescriptions which had complete doctor details it was noted that personalized stamps bearing name, designation and KMC number of the prescriber were used, which is an inexpensive method to improve quality of prescriptions.

Table 3: Number And Percentage Of Prescriptions Containing The Following Drug Details

DRUG DETAILS	NAME	ROUTE	DOSE	FREQUENCY	DURATION	QUANTITY
NO. OF PRESCRIPTIONS CONTAINING THIS DETAIL	108	105	84	96	13	100
PERCENTAGE OF PRESCRIPTIONS CONTAINING THIS DETAIL	100%	97.22 %	77.77 %	88.88%	12.04%	92.59%

Drug details are one of the most important components of a prescription. W.H.O recommends that drug name should be written using generic names and not brand names. But here in the prescriptions collected it was observed that most commonly brand names were used. All the 108 prescriptions collected contained name of the drug to be dispensed. About good percentage of prescriptions contained details of the drug such as route by which it should be taken (97.22%), , frequency- number of times the medication should be given (88.88%) and quantity (92.59%). Very few prescriptions had details about the duration of the drug(i.e, upto how many days it should be taken) written (12.04%) (table 3 and fig 3).

DISCUSSION:

None of the prescriptions fulfilled all the parameters that we looked for. Out of all the parameters, the most commonly missed parameter was duration of the treatment to be given . Duration of treatment was written only in 12% of the prescriptions. Duration of treatment becomes very important which if not mentioned can contribute to toxicities and treatment failures. Following this parameter, the second most commonly missed parameter was age and gender of the patient. Age and Gender was mentioned in 24.07% and 25.92% of the prescriptions respectively. Age becomes very important especially when patient is a child < 12 years of age. It is important to mention gender as few drug responses differ in males and females. Name of the drug was the only parameter which was written clearly in all the 108 prescriptions.

These missing parameters can have bad impact on the health of the patients. As the prescribing Doctor does not dispense the drugs, a legibly written prescription with complete details becomes a very crucial link between the Doctor and the dispensing pharmacist. Prescriptions can be incompletely written either due to heavy OPD load, emergency cases or due to tendency among doctors to give verbal instructions than to write it down (especially information like before food or after food, before bedtime). Since none of the prescriptions fulfilled all the parameters it indicates the lack of prescription writing skills among young doctors.

For example, in our study the duration for which the drug was prescribed was missing in majority of the prescriptions. It is important to mention the duration so as to monitor the drug therapy and also during drug refills. Hence this can lead to catastrophic effects such as steroid abuse, continued usage of painkillers, sedatives, etc leading to its complications. Prescription is an important intervention by the physician, and it is the ethical and legal duty of the practitioner to write complete and legible prescriptions.

Many studies have concluded that once the doctors are newly graduated and qualified, and when they are exposed to their workplace prescription writing, they retrospectively feel that there was inadequate exposure and less importance given to practical aspects of writing prescription in UG curriculum. This problem can be tackled by introducing bedside clinical (more clinically relevant) pharmacology teaching or by using real clinical case scenarios to make it more interactive and interesting to study.[2]

CONCLUSION:

Prescription writing should be considered as an Important and core learning competency. The quality of healthcare provided by a doctor can mainly rely upon writing a complete and legible prescription. Incomplete and illegible prescriptions are more frequently observed to be written by interns and postgraduates. Inadequate knowledge or training about complete and legible prescription writing during undergraduate times often underlies the cause for incompletely written prescriptions. Hence it is important to incorporate prescription writing skills during undergraduate and postgraduate training programs. Such programs are highly benefitted when incorporated into teaching schedule of UG curriculum at the stage when undergraduates are entering into their compulsory rotatory Internship.

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