

Original Research Article**Evaluation/Comprehension of Prescription Writing in V.S General Hospital and Nagri Eye Hospital**Tank Ami¹, Shah Anand², Davda Bansi³, Shah Janmesh², Shah Kesha⁴, Patel Shaiv⁵, Shah Ugam⁶¹Junior Resident, Dept. of Ophthalmology, GMERS Medical College, Ahmedabad, Gujarat, India²Assistant Professor, Dept. of Community Oncology, GCRI, Ahmedabad, Gujarat, India³Junior Lecturer, Dept. of Community Medicine, Smt. NHL Municipal Medical College, Ahmedabad, Gujarat, India⁴Assistant Manager, Dept. of Pharmacovigilance, Lambda Therapeutics Research, Ahmedabad, Gujarat, India⁵Intern Doctor, Intern Doctor, Smt. NHL Municipal Medical College, Ahmedabad, Gujarat, India⁶Resident Doctor, Department of Surgery, Sumandeep Vidhyapith University, Baroda, Gujarat, India***Corresponding Author:**

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Abstract: Improper comprehension of the prescription can lead to wrong drugs taken, misuse of the drug dosage, and ineffective drug action by not following the proper schedule, which was advised, or development of adverse drug reaction, which can be fatal. The objectives is to study if the patient can evaluate/understand the prescription correctly and to study the effectiveness of the communication between the patient and doctor. By a cross sectional study, 192 patients of VS general Hospital and Nagri Hospital were assessed for evaluation of prescription given to them by consultants between January to March 2015. Out of 192 students, 29 (15.18%) did not know and 163 (84.82%) did know the disease they are suffering from. 86 (44.79%) were not able to read the prescription. After analyzing the data collected via basic questionnaire, our study did show that patients might not be able to read the prescription, but the doctors did an excellent duty of explaining the prescription to their patients.

Keywords: Prescription, VS Hospital, Ahmedabad

INTRODUCTION

Having difficulty in understanding the prescription and the proper advice given by the doctors is not uncommon. Many patients around the world have a difficult time understanding the prescription and the warning labels. Improper comprehension of the prescription can lead to wrong drugs taken, misuse of the drug dosage, and ineffective drug action by not following the proper schedule, which was advised, or development of adverse drug reaction, which can be fatal [1].

The number of hospitalization across the world resulting from improper prescription comprehension is increasing. Not only has this led to a rise in hospital burden by not having the required facilities, but also an increase in the hospital costs. Mishaps like these can lead to high mortality and morbidity rates, which can have a huge impact on the health care system [2]. Most importantly, it is possible to prevent these events. Rational Prescribing increases quality of health care [3].

OBJECTIVES

1. To study if the patient can evaluate/understand the prescription correctly.
2. To study the effectiveness of the communication

between the patient and doctor.

MATERIALS AND METHODS

A Cross Sectional Study was done in VS Hospital, Ahmedabad and Nagri Hospital, Ahmedabad. Patients coming to the out-patient department of Medicine, Gynaecology, Dermatology, Ophthalmology and ENT department. After informed consent, 192 patients and their healthy attendants were interviewed by using a standardized questionnaire, focusing mainly on their basic socio-economic characteristics and prescription comprehension between January 2015 to March 2015. OPD patients of VS Hospital and Nagri Hospital were selected. Patients with Trauma care and Emergency care were excluded.

RESULTS

As shown in Table 1, most of the cases belonged to the Medicine Department (89 cases, 46.35%) and least amount of cases belonged to Gynecology (10 cases, 5.21%). ENT consisted of 36 cases, Ophthalmology consisted of 43 cases, and Dermatology consisted of 14 cases.

Table 1: Table of the Distribution of Diseases amongst different departments

DISEASE GROUP	Frequency	Percent
ENT	36	18.75%
Gynecology	10	5.21%
Medicine	89	46.35%
Ophthalmology	43	22.40%
Skin	14	7.29%
Total	192	100.00%

Table 2: Comparison of Level of Education of Patients at VS Hospital with Patients of Aga Khan University Hospital

	VS Hospital	Aga Khan University Hospital
No Education	17	16
Graduate/Post Graduate	0	137
Total	192	181

The sample population at Aga Khan University Hospital had more patients with Graduate/Post-Graduate Education, while the majority sample population at VS Hospital had received education level below Graduate level; hence, consultant needs to pay more attention while giving prescription to the patients at VS general Hospital.

The difference in educational level between VS Hospital and Aga Khan University Hospital is believed that Aga Khan University Hospital is a private hospital, while VS Hospital is a municipal hospital. Therefore, the services provided by a private hospital are not affordable to the lower socio-economic

population, which is available at affordable prices to the municipal hospital.

We have used a structured proforma of 10 questions about prescription, which were asked by personal interview method, the results are shown below in Table: 3. Out of 192 students, 29 (15.18%) did not know and 163 (84.82%) did know the disease they are suffering from. In Q – 2 out of 192 patients, 86 (44.79%) cannot read the prescription, while 106 (55.21%) can read the prescription. For Q – 3, 136 (70.83%) could understand the prescription, while on the other hand 56 (29.17%) people could not understand the prescription. This means that even though 92 patients cannot read the prescription, most doctors did explain the prescription so they can individually understand the prescription. 55 (27.89%) student were aware of the differences, while 137 (72.11%) did not know the importance (Q – 4). For Q – 5, 90 (46.88%) did know the severity of the investigation, while 102 (53.13%) did not know the importance. 46 (23.04%) were knowing the side effects of the drug that they were prescribed, 146 (76.44%) were not knowing any side effects. Q-7 states that 172 (89.58%) people do confirm the drugs with the doctor after they get it from the pharmacist. Roughly 20 (10.42%) cases did not confirm with the doctor. Majority of the patients (184 cases, 95.83%) are aware of the drug schedule, while only 8 cases did not know the drug schedule. On asking Q- 9 we get that most patients (176, 91.67%) are aware of a specific diet, even though it is verbally. Sixteen (8.33%) cases did not know about the diet. Again on asking Q-10 we found that most of the patients (150, 78.13%) were told whether to take the drugs with or without food/liquid. 42 (21.88%) were not told.

Table 3: List of questions asked to patients

QUESTIONS		Answers	
		Yes	No
Q-1	Knowledge regarding Diagnosis	84.82%	15.18%
Q -2	Literacy rates of the prescription	55.2%	44.7%
Q -3	Comprehension/evaluation of the prescription	70.83%	29.17%
Q - 4	Knowing the difference between two drugs	27.8%	72.2%
Q - 5	Importance of the investigation	46.8%	53.2%
Q - 6	Knowledge of side effects	23.1%	76.9%
Q - 7	Drug confirmation with the doctor	89.5%	10.5%
Q – 8	Knowledge of the drug schedule	95.8%	4.2%
Q – 9	Knowledge of a specific diet	91.6%	8.4%
Q – 10	Insight about taking the medication with food/liquid	78.1%	21.9%

Table 4: Comparison of number of patients following up for prescription confirmation at VS Hospital with the number of Patients following up for prescription confirmation at Aga Khan University

Prescription Confirmation	VS Hospital	Aga Khan University Hospital	Combined Percentage
Did Follow-up	172	130	80.97%
Didn't Follow-up	20	51	19.03%
Total	192	181	373

Both the hospital had high population of patients following up for prescription confirmation after buying their drugs. The rate of follow up for both the hospital is high because the patients have a fear of taking the prescription without confirmation with the doctor. The patients' feels that the doctor is the most reliable and the most accurate source to get treatment, hence there is a high ratio of follow-up.

DISCUSSION

Previous studies suggest that misunderstanding instructions on prescription medication labels is more common among elderly persons [4]. In a study done by Moison J *et al* [5] it was found that older population had more difficulties in evaluating the medical prescription, similar finding was seen in our study however only 10% of patients in our sample were older than 60 years so it is possible that we underestimated this relationship. While limited literacy may be a barrier in patient comprehension of the prescription, the instructions also may not have been legibly written and may also not be in a precise manner. More research needs to be done in order to support the best practices for writing prescription instructions to ease the patient's comprehensibility of the prescription.

CONCLUSIONS

After analyzing the data collected via basic questionnaire, our study did show that patients might not be able to read the prescription, but the doctors did an excellent duty of explaining the prescription to their patients. However, our study had limitations. Only patient's comprehensibility of the prescription was investigated. The relationship between lack of misunderstanding the prescription and doctor's handwriting was not assessed. Patients were not monitored on a daily basis and following up on their drug-taking behaviors was also not assessed, which could have been a vital cause to the global increase in hospital admissions as a result of misuse of the prescription.

RECOMMENDATIONS

Prescription writing is a major factor in not being able to read the prescription. Doctors should write the prescription more legibly so that the patient does not have a difficulty in reading the prescription. The doctor should thoroughly explain the drug and its uses, along with the adverse effects concerned with the drug. As the study showed, communication is a vital factor in understanding the prescription. If the doctor explains

the prescription in more detail, then the patient doctor relationship would be firmer. This is due to increased trust between the doctor and the patient.

RESEARCH QUESTION

Can the patients of VS Hospital and Nagri Eye Hospital evaluate/ comprehend the prescription correctly?

REFERENCES

1. Bell, A. (2014). Do you find prescription Labels Hard to read? You are not alone; Review Article; *Quality Matters, U.S. P, 2014*
2. Gurwitz, J. H., Field, T. S., Harrold, L. R., Rithschild, J., & Debellis, K. (2003). Incidence and preventability of adverse drug events among older persons in the ambulatory setting. *JAMA 289*, 1107-16.
3. Sadeghain, G. H., Safaeian, L., Mahdanian, A. R., Salami, S., & KebriaeeZadeh, J. (2013). Prescribing quality in medical specialists in Isfahan, Iran. *Iran J Pharm Res, 12*, 235-41.
4. Patel, M. J., Khan, M. S., Ali, F., Kazmi, Z., Riaz, T., Awan, S. (2013). Patients Insight of Interpreting Prescriptions and Drug labels – A cross Sectional Study. *PLoS ONE 8*(6), e65019.
5. Moisan, J., Gaudet, M., Gregoire, J. P., Bouchard, R. (2002). Non- compliance with drug treatment and reading difficulties with regard to prescription labeling among seniors. *Gerontology, 48*(1), 44-51.