COMPARATIVE STUDY OF EDUCATED AND UNEDUCATED POPULATION REGARDING KNOWLEDGE, ATTITUDE AND UNDERSTANDING OF PRESCRIPTION: A CROSS SECTIONAL STUDY

Dr. Kiran R. Giri*1, Dr. Reena R. Giri2, Dr. Kamlesh M. Palandurkar3, Dr. Swanand Pathak4, Dr. Shraddha Tatkare5, Dr. Anita Yuwnati6

1Assistant Professor, Department of Pharmacology, IMS, Banaras Hindu University, Varanasi.
2Associate Professor, Department of Pharmacology, Government Medical College, Rajnangao.C.G.
3Assistant Professor, Department of Biochemistry IMS, Banaras Hindu University, Varanasi.
4Professor & HOD, Department of Pharmacology, JN. Medical College, Wardha, Maharashtra
5Assistant Professor, Department of Pharmacology, K.J.Somiya Medical College, Sion Medical College, Mumbai, Maharashtra.
6Assistant Professor, Department of Pharmacology, Government Medical College, Akola, Maharashtra.

*Correspondence for Author: Dr. Kiran R. Giri
Assistant Professor, Department of Pharmacology, IMS, Banaras Hindu University, Varanasi.

ABSTRACT
Rationale: Rational use of drug is important for correct prescription; it should fulfil SANE criteria, which means Safety, Affordability, Need, and Efficacy of the drug should always be consider before prescribing it to the patient. Prescription errors are the most prominent type of medication errors. **Objective:** To assess the present status of knowledge about knowledge, attitude and understanding of prescription in the patients and its correlation with education. **Method:** A prevalidated questionnaire based study was conducted amongst 200 patients of tertiary health care hospital. The questionnaire consisted of specific questions regarding understanding of prescription, Questions regarding knowledge of patients and relatives about availability of same drugs with same combinations with different trade names and with different costs, knowledge about purchasing other brand of drugs instead of prescribed one, taking same drugs, buying incomplete dose of drugs. **Statistical Analysis:** Data was analyzed using Fishers exact test to determine the impact of education on the answers. **Result:** Significantly large proportion of patients opined that doctors do not have sufficient time to explain the prescription and they are not aware of generic drugs, cost affect their purchase of prescription. **Conclusion:** Clinically relevant, up to date, user specific, independent, objective and unbiased Medicines Information is the right of every patient and essential for appropriate drug use and can help in a big way to common public to address many problems faced by them.

KEYWORDS: Clinically relevant, education, Prescription, Unbiased.

INTRODUCTION
Prescription writing comprises (a) communication of prescription information, which denotes the act of transmitting prescription information e.g. drug name, dose, or dosage form etc., and (b) transcribing, which is the act of copying information in writing from one document to another. **Errors in prescription writing are comprised of (a) failures to communicate essential information and (b) transcription errors.**

The National Coordinating Council for Medication Error Reporting and Prevention defines a medication error as "any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the health care professional, patient, or consumer related to professional practice, health care products, procedures, and systems, including prescribing; order communication; product labelling, packaging, and nomenclature; compounding; dispensing; distribution; administration; education; monitoring; and use." **Prescription errors are the most prominent type of medication errors.** Almost 70% medication errors are born due to the wrong prescriptions and prescription mistakes. Poor hand writing in prescriptions, drugs with similar packing are the system errors leading to medication administration errors.

Rational use of drug is important for correct prescription; it should fulfil SANE criteria, which means Safety, Affordability, Need, and Efficacy of the drug should always be consider before prescribing it to the patient.

Smallest mistake in Heath Care sector have catastrophic implications. It is very important to establish a system which will provide non-commercial, independent, unbiased source of medicine information.
Info OPD is a concept and step towards safe and appropriate use of medicines.\textsuperscript{[6,9]}

Thus the present study was undertaken with following objectives: To assess the present status of knowledge, understanding and attitude about the prescription in the patients coming to outpatient department of a tertiary care teaching hospital A.V.B.R.H. and its correlation with education.

MATERIALS AND METHODS

**Locus of study**
The study was carried out at a tertiary care teaching hospital.
Acharya Vinoba Bhave Rural Hospital (AVBRH), Sawangi, Wardha,
A teaching hospital of Jawaharlal Nehru Medical College.

**Duration of study**
Three Months.

**Study type**
Cross Sectional Questionnaire Based Observational Study

Ethical committee approval from Institutional Ethics Committee. Ref No.DMIMS(DU)/IEC/2011-12/418.

**Number of Subjects**: 200
100-Educated (Primary and above)
100-Uneducated (No formal education)

**Inclusion criteria**
1. Patients and Relatives above 18 years of age.
2. Patients and Relatives giving consent.
3. Patients and Relatives who understand Hindi, English or Marathi

**Exclusion criteria**
1. Patients and Relatives below 18 years of age.
2. Patients and Relatives who didn’t give consent.
3. Psychiatric patients.
4. Patients and Relatives who do not understand Hindi or English or Marathi

**Figure No.1 Educational characteristics of the population under study**
Validation of Questionnaire was done by Delphi method. After taking the informed consent, individual was asked to fill the questionnaire comprising of 10 questions.

The data obtained was tabulated and expressed in percentage of educated and uneducated subject answering the questions in a specific way. Data was analyzed using Fishers exact test to determine the impact of education on the answers.

**OBSERVATION AND RESULTS**

**Statistical Analysis**
Performed using Fisher exact test. No significant difference was observed in 6 Questions (Questions no. 1, 2, 3, 6, 7, 8) in the educated and uneducated population with $P>0.05$. Whereas only in 4 questions (Questions no. 4, 5, 9, 10) significant difference in the responses was observed with $p<0.001$.

Q.9 How do you differentiate between different drugs?

Q.10 How does doctor explain you about drug intake?
Table: 1

<table>
<thead>
<tr>
<th>Question</th>
<th>Educated 100</th>
<th>Uneducated 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Do you understand the prescription?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES 23.8%</td>
<td>38.4%</td>
<td>9.2%</td>
</tr>
<tr>
<td>NO 76.2%</td>
<td>61.6%</td>
<td>90.8%</td>
</tr>
<tr>
<td>2. Do you think that OPDs are very crowded and doctors do not have sufficient time to explain the prescription?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES 57.8%</td>
<td>49.6%</td>
<td>66%</td>
</tr>
<tr>
<td>NO 42.2%</td>
<td>50.4%</td>
<td>34%</td>
</tr>
<tr>
<td>3. Do you think that chemist have sufficient time to explain the prescription to you?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES 56.2%</td>
<td>22.8%</td>
<td>89.6%</td>
</tr>
<tr>
<td>NO 43.8%</td>
<td>77.2%</td>
<td>10.4%</td>
</tr>
<tr>
<td>4. Do you show the drugs to the doctor after purchasing it?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES 65%</td>
<td>54.8%</td>
<td>75.2%</td>
</tr>
<tr>
<td>NO 35%</td>
<td>45.2%</td>
<td>24.8%</td>
</tr>
<tr>
<td>5. Do you always buy the whole dose of the drug prescribed by the doctor?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES 29%</td>
<td>50.4%</td>
<td>7.6%</td>
</tr>
<tr>
<td>NO 71%</td>
<td>49.6%</td>
<td>92.4%</td>
</tr>
<tr>
<td>6. Do you purchase the drugs of same brand prescribed by the doctor?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES 84%</td>
<td>68%</td>
<td>100%</td>
</tr>
<tr>
<td>NO 16%</td>
<td>32%</td>
<td>0%</td>
</tr>
<tr>
<td>7. Does COST affect your prescription &amp; compliance?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES 78%</td>
<td>78.4%</td>
<td>77.6%</td>
</tr>
<tr>
<td>NO 22%</td>
<td>21.6%</td>
<td>22.4%</td>
</tr>
<tr>
<td>8. Are you aware that same drugs with same combinations are available at different trade names with different costs?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES 6.8%</td>
<td>13.6%</td>
<td>0%</td>
</tr>
<tr>
<td>NO 93.2%</td>
<td>86.4%</td>
<td>100%</td>
</tr>
</tbody>
</table>

DISCUSSION

Overall 61.6% educated individuals didn’t understand the prescription. Understanding of prescription by the patient is as important as correct prescription by the prescriber. The success of treatment depends on the right drug, dose, route, frequency, duration that is called as rational use of drugs. Statistical analysis showed no significant difference in understanding of prescription in educated and uneducated population. In our country there is one doctor for 1,722 people, heavy work load leads to insufficient explanation of prescription to individual patient, many queries remain unanswered which lead ineffective and irrational use of drugs.[7] No significant difference observed in opinion of educated and uneducated population regarding crowded OPDs and unanswered queries both by doctors and chemist. Overall 65 % showed the drug to the doctors after purchasing it. Uneducated people showed the drugs to the doctor after purchasing it. Showing drugs to the doctors may solve many problems such as regarding differentiation, doses, frequency in this regard significant difference was observed in educated and uneducated population. More of uneducated population showed drug to the doctor. Significant difference was observed in educated and uneducated population in differentiating between drugs. Significant difference observed here, uneducated people buying incomplete dose of the drug. Educated people have good compliance. It is patient Right to have complete information of drugs they are consuming effects as well as adverse effects. Significant difference observed in purchasing of drug with same brand name. 78 % individuals feel cost affect their prescription & compliance.

Causes of irrational use include lack of knowledge, skills or independent information, unrestricted availability of medicines, overwork of health personnel, inappropriate promotion of medicines and profit motives from selling medicines. Vigilant assessment of the risks and benefits of medicines promotes patient safety & promote correct prescribing.[10] Medicine Information OPD , where pharmacologist and pharmacist will work together to solve patient queries , guide them about how to take drug, regarding storage, give then a slight idea about adverse effect and precaution, will definitely will lead to Rational Drug prescribing and cost effective treatment.[11][12]

CONCLUSION

Clinically relevant, up to date, user specific, independent, objective and unbiased Medicines Information is the right of every patient and essential for appropriate drug use and can help in a big way to common public to address many problems faced by them.
REFERENCES
4. Elizabeth RN. Errors in administration of parenteral medications are a serious safety problem in intensive care units. Australian College of Critical Care Nurses, 2009; 4(22): 141-3.