European Journal of Molecular & Clinical Medicine (EJMCM)
ISSN: 2515-8260 Volume 07, Issue 10, 2020

Original research article

An evaluation of prescribing pattern of the private practitioners

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Abstract

To evaluate the prescribing pattern, 450 prescriptions of private practitioners were collected and analyzed using WHO/INRUD indicators. There were average 3.78 drugs per prescriptions. Drugs were prescribed in generic name only in 7 prescriptions. About 50% drugs were prescribed from the Essential Drug List; only 18% of prescriptions were complete in respect to patient medical information. Antibiotics were prescriptions; injections were prescribed in about 13.33% of the prescriptions.

Introduction

Medical inappropriate and economically inefficient use of medicines is observed throughout the world. These features are more marked in the developing countries like India. Rational use of medicines is one essential element to be achieved to improve quality of health and medical care for the patients and the community, Laing, 1990;

Medical science in general and therapeutics in particular is developing very quickly and naturally undergoing fast transition. Therefore it has become imperative to train the physicians for self-directed learning (Joshi, 1996) Prescribing appropriate medicines for a disease condition and providing related information in a meaningful way to the patient should be regarded as the key 'transferable skills' to be achieved through Pharmacology courses, Shankar et al., 2003). Generalized presence of irrationalities in prescribing indicates that traditional teaching in medical schools does not adequately prepare students for rational therapeutics. Prescribing behaviour of the medical graduates depends upon how and what they have been taught and trained about drugs during their undergraduate course (Schwartz and Griffin, 1986). A survey had revealed that medical students felt the need for more teaching of therapeutics in the undergraduate medical curriculum (Ward and Miolzweski, 2002).

The current study was an attempt to evaluate prescribing, whether appropriate or rational.

Materials and Methods

Prescriptions of the registered physicians and specialists of different sectors of town at random within a period of two months from June 20 to July 20. A total of 450 prescriptions were collected during this two month long prospective study from the private clinics. They were randomly approached either outside at chemist shop with a request to have their prescriptions photocopied. The clinic collected prescriptions of private practitioners were analysed on the basis of following parameters:

(i) To estimate the total number of drugs prescribed.
(ii) Generic Vs brand products.
(iii) Commonly prescribes drugs.
(iv) Total injectable preparation.

(v) Prescription in format or nor.

No attempt has been made to categorize the prescriptions according to patient's age, sex or disease profile.

Results

After compiling the results it was observed that there were average 3.78 drugs per prescriptions (Table I). Only in 7 prescriptions the drugs were prescribed in generic name; only 28% of prescriptions were complete in regard standard prescription format; only 50% drugs were prescribed from the essential drug list; only 18% of prescriptions were complete in respect to patient medical information. Antibiotics were prescribed in 69.33% of the prescriptions; injections were prescribed in about 13.3% of the prescriptions.

Table 1 : Results of prescription audit (n=450)

Prescribing drug per prescription	Number
Average drug per prescription	3.78
Prescribed in generic name (%)	(1.55%)
Antibiotics prescribed (%)	312 (69.3)
Injections prescribed (%)	60 (13.3%)
Percentage of drugs prescribed from essential drug list	255 (50%)
Whether prescription is complete with respect to Format dosage and duration Patient medical information	126 (28%) 324 (72%) 81 (18%)

Discussion

Researchers have collected, analyzed and audited 450 prescriptions of the private practitioners using INRUD indicators. Through the exercise it was revealed the most of the private prescriber's dit not follow the criteria of rational prescribing. On an average, 3.78 drugs were prescribed per prescription, which was 3.41 in a study conducted in 1996 (Rahmanet al., 1998). In a Nigerian study, the average number of drugs per case was 3.16 (chukwuani et al., 2002).

In the current study, the prescribers prescribed the drugs in generic name only in 7 prescriptions (1.55%), which was much lower than (4.10%) the finding of the previous study (Baqui and Choudhury, 1996). In the current study revealed that prescribers frequently prescribed antibiotics (69.3%) in their prescriptions. This finding is in agreement with the study done by Baqui and Choudhury (1996) where the percentage of patients receiving antibiotics was 73.33%. In an Iranian study (Ansari, 2001), percentage of patients receiving antibiotics was found high (86.2%) However, all these findings do not correspond with the finding of a study conducted in 1998, which reported only 38.7% prescriptions contain antimicrobials (Rahman et al., 1998). In the present study, about 50% of the drugs were presecribed from the Essential Drug List which was almost similar, i.e., 49% to the findings of Baqui and Choudhury (1996) and 8.2% (Rahman et al., 1998). About 60% patients were provided with proper instructions regarding drug dosing and duration (Baqui and Choudhury, 1996), which has increased to 70% nevertheless, only 12.4% prescriptions contained proper instructions about side effects of the prescribed drugs, other relevant advice and follow up of the patients.

From these observations it was evident that the prescribing pattern of the private practitioners is not improving regarding some particular parameters like generic prescribing, polypharmacy, use of antibiotics and provision of information. The reason of this irrational prescribing is perhaps due to the lack of knowledge of the private practitioners on how to prescribe a drug' and 'what information they should provide to their patients' (de Vries, 1994; Rahman et al., 1998) The present exercise was an attempt to evaluate the prescribing pattern.

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Received: 19-09-2020 || Revised: 07-10-2020 || Accepted: 22-10-2020