Short Communication: Drug Information Unit as an Effective Tool for Promoting Rational Drug Use

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ABSTRACT

Background: The rapid developments in medical and biological sciences have led to emergence of huge information on drugs and various diseases. But accessing this vast information has limits and rational selection of drugs and utilization of drugs have become more complex. Information regarding the various aspects of drugs may be conveyed by drug information units which run only in specified tertiary care institutional units, to the physicians who treat the patients in the hospital and to the general practitioners outside, in emergencies and in normal situations.

Methods: The queries of clients were obtained by means of phone calls from 9.00 a.m to 5.00 pm, during 1 month’s stay in a DIU. A resident of Clinical Pharmacology collected necessary data on therapeutic problems of patients (age and sex of the patient, other drugs which were taken, present diseases, whether department was in PGIMER, the place etc.). After solving the problems by using electronic databases or hardcopy sources like established facts in standard text book of medicine, pharmacology or in standard articles and with a final approval from the senior clinical pharmacologist, resident delivered the information to the clients as early as possible, without any delay (by phone).

Results and Conclusion: From the results, it was found that around 59% of the phone calls were regarding drug interactions and adverse reactions, 11% were regarding efficacy and that 30% were regarding the preferred routes and dosing. We concluded that the information that most of the healthcare professionals aimed to get, were the various drug interactions which had taken place during their therapeutic interventions.

INTRODUCTION

In India, in general, there are several ways in which one can obtain necessary information on various drugs. Doctors and pharmaceutical professionals gather information from various sources like the National Agency of Drugs and Medical Devices or from various publications such as Physicians Drug Reference, CIMS, etc. The various conventional methods of obtaining drug information are through the representatives from the pharmaceutical industry and product literature or pamphlets which are provided by the manufacturers of the drugs, which most of the time, seem to be incomplete or to have some kind of bias. So, an important alternative for this is DIC (Drug Information Centre) or DIU (Drug Information Unit), as it is named in some places, which helps in assisting doctors in periphery as well as tertiary and hospital pharmacists in updating information on new drugs which emerge at an international level and in different therapeutic areas. As per WHO, DIC is defined as a service unit which is committed to providing drug information which is related to therapies, pharacoconomics, various education and research programs [1]. The different types of DIU are Hospital based DIC, Industry based DIU and Community based unit [2]. A DIU which provides unbiased information to health care professionals and sometimes to be public who are accessible or to the general population, can obtain information from general practitioners (GP) or qualified pharmacists. At the Department of Pharmacology and Clinical Pharmacology, PGIMER, Chandigarh, there is a Drug Information Unit (DIU), a hospital and a regional centre which offer drug information to both professionals and the general population in and around Chandigarh (approximately 1,054,686 inhabitants) [3].

METHODS

The client queries were obtained by means of phone calls from 9.00 am to 5.00 pm, during 1 month’s stay in a DIU. A resident of Clinical Pharmacology collected necessary data on therapeutic problems of patients (age and sex of the patient, other medications which were taken, present diseases, whether department was in PGIMER, the place etc.). After solving the problems by using electronic databases or hardcopy sources like established facts in standard text book of medicine, pharmacology or in standard articles and with a final approval from the senior clinical pharmacologist, resident delivered the information to the clients as early as possible, without any delay (by phone). Flow chart of the whole process has been given in [Table/Fig-1].

RESULTS

The data which has been presented here was collected by a single junior resident during one month’s stay in a DIU; around 56 phone calls were received. 15 calls were made from internal medicine, 10 calls were made from paediatrics, 13 calls were made from the Department of Psychiatry, 7 were made from the Department of Neurosurgery, 7 were made from the Department of Surgery and 3 were made from the Department of Neurosurgery, 7 were made from the Department of Surgery and 3 were made from the Department of Psychiatry. After solving the problems by using electronic databases or hardcopy sources like NEJM, BJCP, The Lancet, etc. or hardcopy sources like established facts in Standard Text Book of Medicine (Harrison’s Principles of internal medicine), Goodman and Gilman’s “The Pharmacological Basis Of Therapeutics” and “Basic and Clinical Pharmacology” by Katzung and with a final approval from the senior clinical pharmacologist, the information was delivered to the client as early as possible, without any delay (by phone). Flow chart of the whole process has been given in [Table/Fig-1].

DISCUSSION AND CONCLUSION

The way in which information is communicated to health professionals is as important as the content of the information. For drug related information to be effective, it must be accurate, reliable and easily accessible and it must be provided at a very basic and comprehensive level, depending on the professionals’ requirements. The main purpose of the service was to provide reliable, unbiased
and current drug information in the promotion of rational drug therapy, which the healthcare personnel need [4]. The main steps which are involved are: first, to analyze the type of drug information, second, to understand the background of the question, third, to understand the real need of the physician and finally, to follow a systematic approach [5-7]. Steps are being taken to access the doctor round the clock by internet mode, through emails. Like in PGIMER, many DIUs should be opened all over India in most of the medical colleges and information should be conveyed in the settings of emergency as well as in normal situations.

From our results, it can be concluded that a Drug Information Unit (DIU) is a useful source of information for both professionals and the general population, which offers various information on different topics which are related to drugs and it can be an effective method for promoting rational drug use.

REFERENCES


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FINANCIAL OR OTHER COMPETING INTERESTS: None.

Date of Submission: Mar 30, 2013
Date of Peer Review: Jun 01, 2013
Date of Acceptance: Jun 04, 2013
Date of Publishing: Sept 10, 2013