

Opinion On Drug Information Services Provided In A Multi- Specialty Teaching Hospital

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Citation: Vijayakumar TM, Poovi G & Dhanaraju MD. **Opinion On Drug Information Services Provided In A Multi-Specialty Teaching Hospital.** Archives of Pharmacy Practice. 2011; 2(2) pp 57-59.

Abstract

Objective: To evaluate the various drug information queries received, and to access the drug information services provided by the pharmacy practice department.

Method: Drug information queries received during ward rounds, direct communication, telephone or internet etc. were documented in the drug information request and documentation forms prepared by the department over the period of January 2010 to June 2010. Various parameters like status of enquirer, their specialty, mode of receipt of query, purpose of query, type of query etc. were considered for evaluation.

Results: Out of 208 queries received, major 56 (26.9%) from male medical ward. Maximum [82 (39.4 %)] queries were from the physicians. 73 (35.0 %) of the queries were about the recent advances and the updating of the information, It was found that mostly the mode of request was during ward rounds 85 (40.9%). Most of the queries [126 (60.6%)] were answered by written or printout format. Majority of the queries [195 (93.8 %)] were answered directly to the enquirers through direct access. Most of the queries were answered through books in the department [86 (41.3 %)].

Conclusion: Results of the external auditing revealed that requestors were generally satisfied with the service provided. The drug information services provided by clinical pharmacists at the hospital were found to be useful and beneficial to the healthcare professionals and patients.

Key words:

Drug information center, Clinical Pharmacist, Queries.

Manuscript History:

Article Received on: 10th Feb, 2011

Revised on: 30th Feb, 2011

Approved for Publication: 2nd Mar, 2011

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Introduction

Drug information refers to the provision of unbiased, well referenced, and critically evaluated up-to-date information on any aspects of drug use [1]. Drug information is the provision of written and/or verbal information or advice about drugs and drug therapies in response to a request from other health care providers, organizations, committees, patients or members of the public, which relates to specific patients or general information promoting the safe and effective use of medication. Drug information service describes activities undertaken by pharmacists in providing information to optimize drug use [2]. Drug information is stored in variety of media including textbook, journals, newsletters microfiche, optical disks and computer skills to identify the most appropriate resources determine the quality of drug information provided. Such ease of information access will enhance the ability of pharmacist to provide comprehensive patient care. Drug information sources are classified into primary, secondary and tertiary [3]. Quality assurance of drug information can be defined as procedures, which are used to set, promote, maintain and monitor the desired standards for services. Peer review is an essential method of assessing the quality and effectiveness of the Drug Information Centre (DIC) service. It represents providing ideas for improvement and future development of the service [4]. In India, the concept of rational drug use is yet a long way to go. Lack of unbiased drug information and lack of time are some factors that makes the physicians unable to update their knowledge about drugs which have resulted in an increasing demand for independent and unbiased information about drugs for better health care [5, 6, 7]. The present study was conducted to evaluate the various drug information queries received, and to access the drug information services provided by the pharmacy practice department.

Materials and Methods

Assessment and evaluation of drug information services was carried out in KIMS (Konaseema Institute of Medical Sciences), Amalapuram, Andhra Pradesh is an 800 bedded ultramodern multi - specialty hospitals with medical college, for a period of five months (From January 2010 to June 2010).

Preliminary plan:

- Preparation and implementation of Drug Information Query Request Form
- Preparation of Drug Information Documentation Form
- Preparation of Drug Information Feedback Form
- Preparation of Drug information evaluation form
- Awareness about the Drug Information Services to the Healthcare professionals and other members involved in the study
- Detailing about the mode of requests (verbal, phone, mail, query box etc.)

Data collection:

- Receiving the drug information query request form from the enquirers through the various sources and mode of request
- Documenting the request forms and categorizing and recording the demographics of the enquirers, queries requested, sources and the mode of communication used by the enquirers.
- Retrieval of the information requested by the enquirer
- Response to the queries – orally or written
- Follow-ups and communication of the reply to the query and its documentation
- Feedback documentation and recording- whether information is satisfactory or not.
- Quality assurance of the service provided

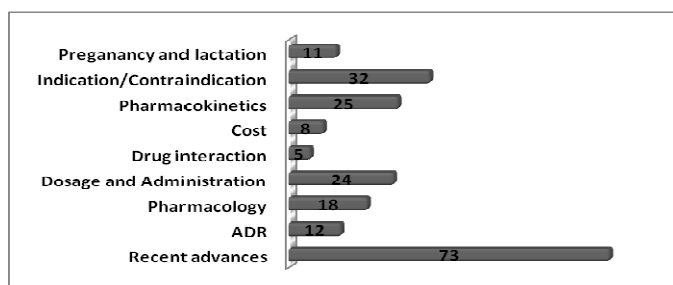
Results

Sources of Queries: The main sources of the queries from the hospital site were ICU, Male medical, Female medical, Pediatrics ward, Male surgical, Female surgical, Outpatient department and maternity ward. Out of 208 queries, maximum from male medical ward 56 (26.9%). Followed by ICU (21.6%), Female medical (18.3%), Maternity ward (11.5%), Pediatrics (7.2%), Out-patient department (6.7%), Male surgical (4.3%) and Female surgical (3.3%).

Categorization of Enquirers: According to enquirer's categorization, 82 (39.4 %) queries were from the physicians followed by Nurses (23.1%), P.G students (21.2%), Pharmacist (15.4%) and Patients (0.01%).

Query categorization: According to Drug Information Query categorization, 73 (35.0 %) of the queries were about the recent advances and the updating of the information. Others from Adverse drug reactions, Drug-drug interactions, Drug-food interactions, indication/Contraindication, Pharmacokinetics, Cost, Pregnancy and lactation, Administration dosage and pharmacology of drugs. [Fig 1]

Figure: 1 Categorization of different queries



Resources used for answering Queries: Most of the resources used for answering were using the books in the Department 86 (41.3 %) followed by Internet sources 48 (23%), AHFS drug information 47 (22.5%) and Merck manual 27 (13.2%).

Mode of request: It was found that most of the queries were asked during ward rounds 52 (24.95%). Others from Query box 51 (24.41%), Messages 48 (23.18%), Telephones 30 (14.03%) and Mails 27 (13.42%).

Mode of answer to the Queries: Most of the queries were answered by written and printed format 126 (60.6%). Remaining queries were answered verbally.

Purpose of Query: Most of the queries were raised for updating of the knowledge 112 (53.66 %). Remaining queries were raised for producing better patient care.

Time taken for answering to queries: In most of the cases the response to the queries were given on the next day. 86 (41.3%) of the query response were given on the next day, 77 (37%) on the same day, 34 (16.3%) of query response was given immediately and 11 (5.3%) were given within a week.

Evaluation: The standardized quality assurance form which included performance criteria based on ASHP standards for drug information practice and the systemic approach to drug information retrieval. An external auditing of 52 randomly selected queries was done, to evaluate both the quality of the service provided by the drug information centre and also the characteristics of the drug inquiries. Out of 52 queries which were randomly selected, as 3 queries per week for evaluation, the grading were as following 31 (59.6 %) were considered as excellent.

Discussion

The Drug Information Centre receives a significant number of queries. Though the main purpose of the drug information centre is to improve the patients care by optimizing the drug therapy but many of the queries received by the centre were to update the knowledge. The doctors and the pharmacist were the major utilizers of the drug information services. The doctors had more chances to give the drug information query request due to the direct access with the pharmacist during the ward rounds. The standard reference books were the most commonly used references. The centre also utilized World Wide Web sources and IDIS, Medline and various journals for the services. Most of the queries required immediate answer hence the mode of reply was mostly verbal, which was the similar to results of the study conducted by Padma GM Rao *et al* [8]

Majority of the queries were from the general medicine department which covers the areas such as cardiology, respiratory, oncology, etc. Further there were also an increased number of queries in field of alternative medicine and clinical pharmacology (drug effects). Results of the external auditing indicate that the most of the requestors were generally satisfied with the service provided. The feedback questionnaires had recorded a positive response from the requestors. A future plan for

the drug information requests from the other members of the public and the drug information services to them should be taken into consideration. The feedback questionnaires have recorded a positive response from the requestors. A future plan for the drug information requests from the other members of the public and the drug information services to them should be taken into consideration.

Conclusion

The drug information services provided by clinical pharmacists at the hospital were found to be useful and beneficial to the healthcare professionals and patients. In conclusion, it is believed that the pharmacists in other hospitals all over the country would appreciate the value of their involvement in pharmaceutical care and attempt to extend their services to the inpatients of the hospital.

Limitations

Our study only focused on Hospital In-patient and Out-Patient settings not from the Community Pharmacies.

Acknowledgments

We wish to thank all healthcare professionals working in KIMS multi-specialty Hospital, Amalapuram, Andhra Pradesh, India

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