Chapter 5

DRUGS AND POISON INFORMATION

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INTRODUCTION

DRUG INFORMATION:

- ***Drug information*** *means providing clinically relevant information on any aspect of drug use relating to individual patients, or general information on how best to use drugs for populations.*
- ***Drug information service*** *can be applied to any activity where information about drug use is transferred, and includes patient-related aspects of pharmaceutical care.*
- *A* ***Drug information center*** *is an area where pharmacists(or other health care professionals) specialise in providing information to health professionals or public.*
- *The drug information centre provides authenticate, unbiased information to healthcare professionals, provide tailor-made counselling and health information to patients/consumer as well as monitor and document adverse drug reactions.*

- *The first drug information centre was opened in 1962 at the university of Kentucky medical centre and was intended to be utilised as a source of selected, comprehensive drug information.*

- *A drug information centre can also contribute to* ***pharmacovigilance****(adverse drug reaction reporting),* ***drug use reviews, health education programmes*** *and* ***clinical research.***

POISON INFORMATION:

- ***Poison information*** *is a specialised area of drug information which includes information about the toxic effects of chemicals and pesticides, hazardous material spills , household products , overdose, of therapeutic medicines including mushrooms, animal toxins from bites of snakes , spiders and other venomous creature and stings.*

Main Objectives:

The objectives of DIC are:

- *To provide an organized database of specialized information on medicines and therapeutics to meet the drug information needs of practitioners.*
- *To educate pharmacy students to serve as effective providers of medicines information. [13]*
- *To provide accurate and unbiased medicines information service to the pharmacists, physicians and other health care professionals in the hospital and community.*
- *To promote patient care through rational use of medicines.*

DRUG INFORMATION RESOURCES:

- *Textbooks, newsletters, journals,*
- *Newsletters, microfiche reader,*
- *Optical discs,*
- *Computer systems*
- *Tertiary resources >>>Secondary resources >>>Primary resources*

Primary resources:

- *Primary literature describes unique experiences which change the world in terms of available knowledge.*
- *They are the foundation on which all other drug information is based. These include journal publications on drug-related subjects, such as reports of clinical drug trials, case reports, and pharmacological research. Evaluating primary literature is difficult.*
- *The most reliable evidence comes from reports on randomized controlled trials. Proper evaluation of these trials requires considerable experience, and systematic reviews of combined trials (meta-analyses) may be necessary.*

- *Sources:*

➢ ***Medical and therapeutics Journal:***

***annals of internal medicine.**

***british medical journal.**

**journal of the medical association.*

** New England Journal of Medicine.*

➢ ***Pharmacy journals**:*

** American Journal of Hospital Pharmacy.*

** Clinical Pharmacy.*

** DICP-Annals of pharmacotherapy.*

** Journal of Clinical and Hospital Pharmacy.*

➢ ***Drug and Toxicology Information and Pharmacology Journal**.*

** British Journal of Clinical Pharmacology.*

** Human and Experimental Toxicology.*

Secondary sources:

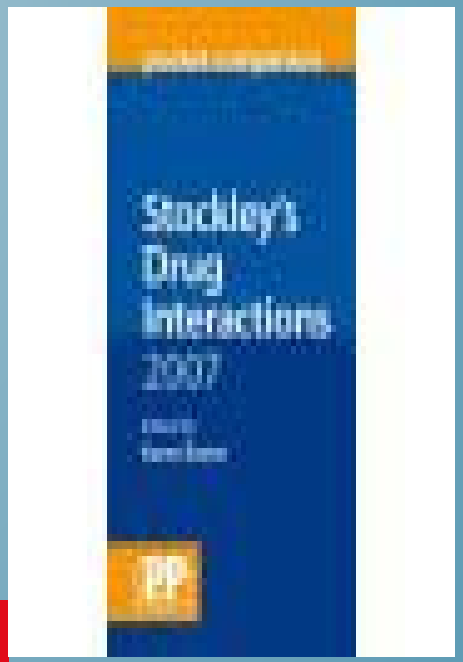
** secondary sources consists of reviews of primary reports. These provide a personal perspective of the literature and can include cooments on how the author might apply the information in practice.*

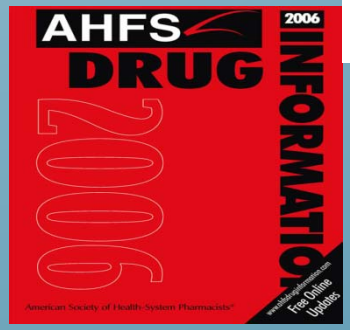
- *Medline*
- *International PharamaceuticalAbstracts*
- *Chemical Abstracts*
- *IOWA drug Information Service*
- *DRUGDEX*
- *Martindale*
- *POISINDEX*

Tertiary resources:

Tertiary resources are summaries of the primary and secondar published literatre. Printed textbooks are the main example and these a characterised by a slow rate of revision compared to secondary sources

- *AHFS-Drug information Book;AustralianMedicine Handbookook; Meylersside effect of drugs*
- *Avery's Drug Treatment*
- *Basic skills in interpreting Lab data*
- *Drug information handbook*
- *Drug interactions Stockley/ Facts and comparison*
- *Handbook of injectables*
- *HarrisonsPrinciples of Internal Medicine*
- *Martindale, Pharmacopoeias, Physicians desk ref*
- *Merck index, Merck manual,*
- *BNF, USP, Australian formulary*





Alternative other resources

- *Local drug lists*
- *National formulary*
- *Hospital formulary*
- *Phone calls to manufacturer, medical shops, government and national organisations, drug information centers*
- *Internet, Medscape*
- *Cochrane meta analysis*

Examples of specific sites include:

- *National institute for health and clinical excellence, UK (WWW.nice.org.uk)*
- *National prescribing centre, Uk (WWW.npc.org.au)*
- *Canadian agency for drugs and technologies in health (WWW.cadth.ca)*

ANSWERING DRUG INFORMATION QUERIES

Approach to answering drug information queries:

- *Analyse the type of drug information*
- *Understand the background of the question*
- *Understand the real need of the physician*
- *Follow systematic approach*

THE BASIC STEPS TO APPROACHING DRUG INFORMATION ENQUIRIES ARE:

***1. Secure demographic details of the requester**:*

**identify the enquirer and obtain sufficient details*

** the requestor's profession.(physician, pharmacist, nurse, lay person)-to know education, experience and knowledge base.*

***2. Obtain background information**.*

General questions for obtaining background information includes

** The resources that the requestor already consulted*

** Whether the request is patient specific or academic*

** The patient' diagnosis, medications and pertinent medical information*

**The urgency of the request*

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***3. Refine and categorise the ultimate question**:*

** Classification of the request helps in developing a more effective search strategy and in determining the resources that should be used.*

**This information may help to refine the question and to estimate the time required to achieve an acceptable response.*

** example of question classification:*

- *adverse drug reaction/ contraindications*
- *availability*
- *Dose*
- *Drug compatibility/ stability*
- *Drug interaction*
- *Drug therapy*
- *Drug identification.*

4.Develop a strategy and conduct a search:

*******The pharmacist should select and prioritize resources based on the probability of locating the desired information.*

Conduct a systematic search:

**Be familiar with the three types of information sources in the literature hierarchy*

**Begin with the established knowledge located within the tertiary literature (e.g., textbooks) due to the condensed, easy-to-use format of the information presented*

** Progress through the secondary literature (e.g., PubMed, International Pharmaceutical Abstracts [IPA]) to the primary literature (e.g., controlled clinical trails, letters to the editor)*

5.Perform evaluation , analysis and synthesis:

** The pharmacist should confirm information with other references to assure consistency between various resources and whether clinical research is relevant to your population or specific patient.*

** The pharmacist should apply his or her techniques and skills for literature evaluation and clinical application for statistical analysis*

6.Formulate and provide a response:

** answers should be derived only after critically analysing information obtained from a comprehensive search.*

** provide a formulated response to the enquirer in a timely manner.*

** present the competing viewpoints along with the reference.*

** all responses should be documented with the minimum detail necessary to justify the response.*

7.Conduct follow-up and document the outcome:

****** *determine the consequence of your advise and any patient outcomes.*

****** *advise provided should be recorded in at least ine mode of documentation (log book, paper worksheet, computer database).*