# **Drug Information**

- ✓ It refers to "current, critically examined, relevant data about drugs and drug use in a given patient in a particular situation"
- ✓ It can be obtained from various sources such as National Formularies, Monthly Index of Medical Specialities, Current Index of Medical Specialities etc.



- Various sources of drug information exist.
- Some of these are commercial, others are non-commercial.
- Information is available verbally, in written form and on the internet.
- No source can provide all the information about drugs and one has to refer to more than one source.
- Hence it is important to know the type of information provided by these sources.

#### DRUG INFORMATION RESOURCES:

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

# Sources of Information The various sources of drug information can be broadly classified in Primary Secondary Tertiary

## **Primary Source**

- ✓It <u>include unpublished studies</u>, <u>original articles published in</u> reputed peer-reviewed journals reporting original research, ideas or opinions.
- ✓ It consists of clinical research studies and reports, both published and unpublished.
- ✓ Journals that publish primary literatures include Annals of Internal Medicine, Clinical Pharmacology and Therapeutics etc.

#### 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 (metaanalyses) may be necessary.

#### Sources:

- 1. Medical and therapeutics Journal:
- Annals of internal medicine,
- · British medical journal,
- Journal of the medical association,
- New England Journal of Medicine.
- 2. Pharmacy journals:
- American Journal of Hospital Pharmacy.
- Clinical Pharmacy.
- DICP-Annals of pharmacotherapy.
- Journal of Clinical and Hospital Pharmacy.
- 3. Drug and Toxicology Information and Pharmacology Journal.
- British Journal of Clinical Pharmacology.
- Human and Experimental Toxicology.

#### Secondary sources:

Secondary sources consist of reviews of primary reports. These provide a personal perspective of the literature and can include comments on how the author might apply the information in practice.

- Medline
- International Pharmaceutical Abstracts
- Chemical Abstract
- IOWA drug Information Service
- DRUGDEX
- Martindale
- POISINDEX

# **Tertiary Source**

✓It summarizes data from the primary and secondary literature and they include reference books, essential drugs list, treatment guidelines, drug formularies, drug bulletins and pharmacopoeias. ✓ It includes textbooks and references like American Hospital Formulary Services, Martindale the Complete Drug reference, Meyer's side effects of drugs, Remington's Pharmaceutical Sciences and United States Pharmacopoeia Drug Information.

#### Tertiary resources:

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

- AHFS-Drug information Book, Australian Medicine Handbook, Meyler's side 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
- Harrison's Principles 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 centres
- Internet, Medscape
- Cochrane meta analysis

### **Electronic Bulletin Board**

- ✓ Electronic bulletin boards are local bulletin boards, which are posted through a server and can be used with the help of a computer and a modem
- ✓ The healthcare industry is increasingly turning to billboard advertising to promote various medical services



## Other sources of Information

- ✓ They primarily include local and national webpage's, professionals and government organizations and pharmaceutical manufacturers.
- ✓ The ability to use the quality of information obtained from the web is increasingly important for pharmacists for the benefit of patients as well as of their own.

#### **Internet Web Sources**

# Some Useful Internet Web Resources World Health Organization:

- 1. http://www.who.int
- 2. Australian Prescriber: http://www.australianprescriber.com
- 3. British Medical Journal: http://www.bmj.com
- 4. The Free Medical Journal http://www.freemedicaljournals.com

## **Computerized Services**

- Access Medicine: Medical reference books including Harrison's Online; Goodman and Gilman's Pharmacology, Current Medical Diagnosis and Treatment etc.
- **2. Cochrane Library:** The Cochrane Library provides reliable and up-to-date information on the effects of interventions in health care.
- Micromedex: Drug and dosage information, toxicological substances, patient information databases, and other data to support clinical care decisions.

- **4. Natural Medicines (formerly Natural Standard):** Evidence-based information about complementary and alternative therapies.
- **5. PMC**: PubMed Central is a free full-text archive of biomedical and life sciences journal literature at the U.S. National Institutes of Health's National Library of Medicine.
- **6. PubMed:** Scholarly journal articles about health and medicine, nursing, and biology.
- 7. **Scopus:** Scholarly journal articles and conference papers on any topic in science, technology, medicine, social sciences, and arts and humanities.
- **8. TOXNET (Toxicology Data Network):** Scientific articles, factual information, and data on toxicology, hazardous chemicals, environmental health, and toxic releases.
- 9. Lexi-Comp: Drug identification, patient education, drug calculators, toxicology, and IV Compatibility.

## Storage and Retrieval of Information

#### Define:

- ✓ The systematic process of collecting and cataloging data so that they can be located and displayed on request.
- ✓ Computers and data processing techniques have made possible the high-speed, selective retrieval of large amounts of information for government, commercial, and academic purposes.