

**IDEAL DRUG INFORMATION CENTRE - A MISSION TO INCREASE
THE COMMUNITY KNOWLEDGE ABOUT DRUG**

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ABSTRACT

To evaluate different drug information queries, and to assess the quality of services provided by the drug information center of the pharmacy practice department. WHO recognizes independent drug information centers as a core component of national programs to promote the rational use of drugs. Pharmacists and other healthcare

workers routinely provide drug information to the community. Dispensed drugs should always be accompanied by appropriate directions for consumers, and pharmacists should have the skills and resources to provide basic information to other health professionals.

KEYWORDS: drug information Centre, requirement of DIC, need of DIC, drug safety, networks of DIC, Drug Information Bulletin.

INTRODUCTION

- A “DRUG INFORMATION CENTRE” is an area where pharmacists (or other health professionals) specialize in providing information to health professionals or the public.
- The unique aspect of drug information centre is that it draws together a range of information resources and makes them accessible to people who know how to make the best use of them.

OBJECTIVES OF DIC

- Drug information centre is regarded as gateway of drug information.

- The aim of drug information centre is to provide information about accurate use of medicine to the pharmacist, physician and health care professionals in the hospitals and community.
- To give education and information to pharmacy students to serves as effective providers of medicine information.
- The role of drug information centre is to spread the awareness about drug information service and rational use of drug

FUNCTION OF DIC^[1]

Drug Evaluation

Assessment of therapeutic drugs is an important function of a drug information centre. The centre must have access to the principal medical and pharmaceutical journals. The critical assessment of the medical literature, and information from industry and media sources. Critical analysis of published research includes an interpretation of the results in terms of relevance to local practice.

Therapeutic Advice

Many centers offer patient-related drug information as their primary activity. This requires an adequate understanding of disease states and therapy.

Therapeutic advice includes factors such as efficacy, optimum dosage, interactions, adverse effects, mode of administration, effects of other disease states, and strategies to promote adherence in chronic conditions.

Pharmaceutical Advice

- Most other enquiries will relate to pharmaceutical preparations generally and include issues of availability, formulation, cost, storage and stability.
- The primary function of a drug information centre is to respond to enquiries on therapeutic drug use. Most centres provide services to health professionals and some also offer a service to the public. In some cases toxicology information is also provided.
- Where patient care is the primary focus, drug information practitioners must have adequate clinical training and experience to complement their information retrieval skills.

Education And Training

- Educational activities are important to support the quality use of drugs. Providing information to health professionals and the public is part of continuing health education.
- A drug information centre can also support national and regional authorities responsible for drug use programs. Training graduate and undergraduate students is an important aspect of overall clinical training.
- Healthcare practitioners need to understand the scope and functions of drug information centres in order to utilise the services they offer.

dissemination of information

Drug information centres can disseminate information in the form of drug monographs, bulletins and websites. Editorial skills are important for these functions. The International Society of Drug Bulletins (ISDB) runs training courses for editors and together with WHO, is preparing a manual for developing independent drug bulletins.^[5]

Research

- Drug information centres should be involved in research activities including pharmaco-epidemiology, e.g. drug utilisation studies and pharmacovigilance.
The nature of enquiries received can be used to plan educational programs within the centre or provided to organisations responsible for improving the quality of drug use.
- Specialist centres should also assess the quality and relevance of commonly used information resources.

Pharmacovigilance

- Drug information centres often have a role in programs which monitor adverse drug reactions.
- Enquiries about a potential adverse reaction can lead to reports of suspected reactions and research may be required to assess the likelihood that a drug has contributed to a reaction or for subsequent patient management.

Toxicology

Toxicology services provide information and advice on the diagnosis and treatment of poisonings. Toxicology services are best located within hospitals where there is liaison with clinicians who treat patients with poisoning.

Resources

Drug information centres should have the following resources for effective functioning.

Personnel

- The number of personnel required will depend on the range of activities offered and the hours of service.
- A centre should aim to provide a direct service during periods of major demand by its clients.

Management

Management is an important component of a successful drug information centre a centre specialising in drug information requires coordination, monitoring and promotion. The manager's responsibilities include.

- staff recruitment and coordination
- Training
- promoting the service;
- identifying and maintaining appropriate resources;
- data management and reporting;
- quality assurance and improvement;
- communication and co-operation with colleagues, professional organisations(e.g. FIP Pharmacy Information Section), networks, university departments of pharmacy practice, and government agencies;

Texts and Databases

- The centre should maintain its own library of commonly used resources.
- Additional books and other publications should be accessible in hardcopy or electronically from external sources.
- An adequate literature search requires an understanding of available sources and their limitations, and training in the use of indexing terms and functions.

Facilities

Basic equipment required for a centre include.

- Furniture -desks,
- Communications -telephones, facsimile, internet access;

- Computers -including external data backup, printer;
- Software -for word processing, spreadsheets, databases textbooks and electronic information resources.

Classification of Drug Information Centre^[2]

The drug information centre classified on the three bases-

1. Hospital based drug information centre
 2. Industry based drug information centre
 3. Community based drug information centre
- 1) **Hospital based DIC:** The hospital-based DIC perform various activities which include answering the in-house call, assist in formulary decision, participate in drug use evaluation, coordinate adverse drug reaction reporting, publishing newsletter, provide in service education, assist in Pharmacy and Therapeutic committee (P and T) committee, oversee investigational drug activity.
 - 2) **Industry based DIC:** The primary source of information is the manufacturing company. Industry based specialists can be contacted via the manufacturer's websites and the physician.
 1. **Community based DIC:** The community based DIC provide accurate and unbiased medicines information service to the pharmacists, physicians and other health care professionals in the hospital and community.

Role of pharmacist in providing drug information

- Pharmacist play important role in drug information centre(DIC)
- They provide information about medicine to the patient.
- They act as drug information provider, which give knowledge of drug therapy, information technology changes, changing philosophies of pharmacy practice.
- Creating and maintaining currency of a variety print and online educational resources for patient. e.g. tip sheet, pamphlets .
- Educating health care professionals on safe and effective medication use.
- Participating in quality improvement research projects and drug cost analyse.
- Educating pharmacy students and society.

Types of drug inform queries

- Therapeutics, drug availability, optimization

- Adverse drug reactions
- Dosage and administration
- Pharmacokinetics
- Pregnancy
- Poisoning and toxicity

Services offered by drug information centre^[3]

- Information about drug
- Poison management information
- Patient education service
- Assistance on drug usage to patient
- Professional assistance for investigations in drug usage
- Drug related information to hospital staff
- Reporting and investigating ADR
- publication

Requirement for setting up a drug information centre^[4]

- Qualified staff with continuously updated knowledge
- Unbiased information
- Not independent information
- No commercial interest
- Growth of information technology
- Growth of clinical pharmacy education.

There are two basic requirement for setting up a drug information centre

1. A trained and skilled person/pharmacist to provide drug information
2. Updated drug information literature

1. A trained person should possess following quality

- knowledge of pharmacy, medicines and public health
- good communication skill with peoples
- should possess good verbal skill
- deep knowledge about drug and medicine
- expressed interest and commitment to work in the field

Selected professional can be trained in well-established DIC that provides various training like.

- How drugs information is produced.
- the role of drug information centre
- the role of drug information centre in the health system.
- critical evaluation of drug information including internet.
- drug information service practice.

2. Updated drug information literature

- There are many articles, books, websites that suggest drug information sources that could be present in drug information centre.
- The reliable drug information can be found on various websites.
- Also there is number of free drugs bulletins are available.

Need of drug information centre in india^[5]

-Nowadays India facing variety of problems about use of drug.so to overcome this problems there is need of DIC.

-There are need of drug information centre due to some following reasons:-

- Lack of awareness of rational use among various health care professionals.
- Lack of adequate drug information due to limited availability of current literature and poor documentation, poor funding available.
- In India low income level population, multiple health care system and lack of awareness of risk and benefits of drug therapy.
- High level illiteracy of patient.
- Limit the sale OTC drugs.
- More than 80,000 formulation in the market that makes very difficult for a person to remember it all.

Networks of drug information centre^[4]

The networking of drug information centre can involve two or more centres and includes regional, national and international links.

-Network provides opportunities for:

- Sharing resources and experience
- Inter-site training
- Establishing standard operating procedures

- Quality assurance program with external review
- Increased awareness of practice in different locations and culture
- Help to solve difficult questions
- Developing drug information software's
- Developing research projects
- Consolidate statistical data from drug information centre

A possible approach could be joint organization of training courses to improve the knowledge of drug information specialists about topics like evidence based practices or pharmacoeconomics.

In Brazil the Brazilian Drug Information System (SISMED: Sistema Brasileiro de informaco sorbe medicamentos) is a voluntary network of DIC. It currently has 21 members.

Drug safety information

- All drugs have risk and health care professionals and patient must balance the risk and benefits of a drug therapy when making decision about whether to use the drug.
- FDA provides information about drugs and also about their adverse reaction or drug risk.
- In recent years, FDA has begun making information on potential drug risk available to public earlier.

Examples of important drug safety issues

- Serious adverse reaction after drug approval
- Medication errors.

It includes confusion between drug names and confusion regarding drug labelling.

- Self- medication
- Drug interaction

Maintaining of drug safety

- Patient-focused information (patient labelling) could help prevent serious adverse effect.
- A drug product has serious risk of which patient should be aware.
- Provide safety information through drug information centre(DIC)
- DIC is the best way to provide drug safety information to pharmacist, health care professionals and patient.

- DIC provides drug safety information through various media like website, pamphlets, articles, professional journals, broadcast, conference calls etc.

Drug information bulletin^[6]

The main objective of drug information bulletin is to provide information on new medicines released on the market and on changes in summary of product characteristics specific to the local scenario.

Definition of drug information bulletin

“Drug bulletins are specialised periodicals providing comparative information and advice on the prescribing and use of medicines.”

- Doctors and pharmacist are primary audience of drug bulletin.
- The main aim is to provide practical, reliable information about medicines and promote more rational, informed decision about their use.

Role of drug information bulletin

- Bulletins are published frequently so it provides up to date information.
- Bulletins can criticise individual advertising claims, therapeutic recommendations and official licensing decisions.
- Bulletins base their recommendations about treatment on assessment of relative efficacy, safety quality and cost when compared with other medicines that are already available.
- It act as a link between the drug information centre and health professionals like nurses and pharmacist.
- It also publish the matter in “Question-Answer” session and abstract on “New Developments”

List of drug information centre in india^[7]

Independent drug information	Hospital attached drug information centre with clinical pharmacy
<ul style="list-style-type: none"> • CDMU Documentation Center, Calcutta • Drug Information Center, Maharashtra State Pharmacy Council, Maharashtra • Andhra Pradesh State Pharmacy Council, Andhra Pradesh • Karnataka State Pharmacy Council (KSPC), Bangalore, Karnataka • JSS, Ooty, • Pharma Information Center, Tamilnadu, Chennai 	<ul style="list-style-type: none"> • Christian Medical College Hospital Vellore, Tamilnadu • Drug Information Center, (KSPC), Victoria Hospital, Bangalore, Karnataka • Drug Information Center, (KSPC), Bowring & Lady Curzon Hospital, Bangalore, Karnataka • Department of pharmacy practice, Chidambaram, Tamilnadu • Department of Pharmacy Practice, National institute of Pharmaceutical Education and Research (NIPER), Chandigarh • Jawaharlal Nehru Medical College Hospital (JNMC), Belgaum, Karnataka • JSS, Mysore, Karnataka • JSS, Ooty, Tamilnadu • N.R.S. Medical College & Hospital, Calcutta • Kempagowda Institute of Medical Sciences (KIMS), Bangalore, Karnataka • Kasturba Medical College (KMC), Manipal, Karnataka • Poison Information Center, All India Institute of Medical Sciences (AIIMS), Delhi • Poisons Information Centre, National Institute of Occupational Health, Ahmedabad • Dept. of Toxicology, (Incl. Poison Information & Laboratory Services) Amrita Institute of Medical Sciences & Research, Cochin • Toxicology & IMCU Unit, Government General Hospital, Chennai • Sri Ramachandra Hospital, Porur, Chennai • Sri Ramakrishna Mission Hospital, Coimbatore, TamilNadu • Trivandrum Medical College, Trivandrum

CONCLUSION

- Drug information centre plays an vital role in improving rational use of drug.
- Drug information centre forms link between physician and public which helps to provide information access easily.

- It provide information regarding with drug to pharmacist, physician and patient.
- Drug information centre publishes drug information bulletin wwhich provides new technologies and resources.

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