

DRUG INFORMATION SERVICES IN INDIA: A REVIEW**Anjali K.^{1*} and S. P. Bhatt²**

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ABSTRACT

The rapid advancements in science and technology has given rise to huge number of medicines and vast amount of informations are now available regarding drugs and diseases. When practitioners don't have time to sort out the informations from all the medical journals there tend to be a rise in irrational drug use. In such a situation a drug information centre (DIC) can help in providing unbiased information for ensuring rational drug use. DIC is defined as a service unit committed to providing drug information related to therapies, pharmacoeconomics, education and research programs. WHO recognizes DIC as a core component of national programmes to provide rational drug therapy. Even though this is a well established concept abroad, India is still in stage of infancy. In India the southern states have a well equipped facility for drug information services but the same is lacking in north India. The provision of DIC is important for better health care even though its running is challenging in

developing countries.

KEYWORDS: Drug information services, drug information centre, clinical pharmacy, India.

INTRODUCTION

Drug information is the provision of written / verbal information about drugs and therapy in response to a request from other healthcare providing organizations, committees and public.

Drug information service is a highly successful programme in developing and promoting rational drug therapy. WHO has recognized drug information centres as core part of national programmes in promoting rational drug therapy. The responsibility of pharmacist in providing drug information has increased over last years making them competent enough to be a core part of individualized drug therapy along with other health care professionals.^[1]

Understaffing, ill-defined quality assurance programmes, outdated drug information sources, inappropriate working facilities and lack of clerical and managerial skills are the main challenges for running a DIC in developing countries.^[2] In 2011, Tadrous *et al.* published a paper on establishment of a 1 or 2 year resident programme for complete drug information triad in hospital, industry and academic sides. The primary goal of the residency is to provide a directed, postdoctoral program in the specialty areas of drug information while developing competency in the operation and management of academic, industry, and hospital drug information services.^[3] This can be done in India too as we need highly skilled personnel.

India being a developing country with large population, we are in high need of drug information. In India the doctors are dependent on medical representatives for information regarding medicines. These representatives, obviously biased towards their products, cannot be considered a strong source for unbiased information. When there is unbiased information it can promptly help with the health care which is highly required in India.

Even though the first DIC in the world was established in 1962, in India it came in the late 1990s. The pioneers to this concept in India were JSS College Ooty and Trivandrum Medical College. The Karnataka State Pharmacy Council DIC was set up in the year 1997 and this was the first independent DIC in India. Maharashtra state Pharmacy Council centre was the third DIC set up in India and the first in the west zone. Upon recognizing the need for an organized information WHO India in collaboration with Karnataka State Pharmacy Council had established 5 DICs in India by 2007. Those were in Haryana, Chhattisgarh, Rajasthan, Assam and Goa.

DICs run by State pharmacy council

1. Drug Information centre, Maharashtra State Pharmacy Council
2. Andhra State Pharmacy Council
3. Drug Information centre, Jaipur, Rajasthan
4. Karnataka State Pharmacy Council, Bangalore, Karnataka

5. Gujarat State Pharmacy Council, Gujarat^[4]

Challenges in establishing DICs in India

In India we have lack of adequate information due to poor documentation, limited availability of literature and poor funding. There is a lack of unbiased drug information service in India making it difficult for healthcare workers to get knowledge about different products. The only source remaining is medical representatives who obviously being partial towards their product, cant be considered a reliable source of drug information. The following challenges also makes establishing of DIC difficult.^[5,6]

1. Funds

A major part of the budget should be devoted for salaries for the drug information pharmacists. Another part should be devoted for maintenance and equipment. The services provided should be free of cost and financial sources can be hospitals, philanthropic organizations etc.

2. Personnel and qualification

A full time staff should be available to provide information regarding the queries received. Additional training should be provided to the person to specialize in giving the information.

The number of staff should be directly proportional to the number of queries received. Since in India we have lack of qualified personnel, this requirement is hardly met.

3. Office, Equipments and other Facilities

A DIC should have its own office room for functioning. The office should have adequate facilities for storage, retrieval of documents and for holding meetings. It should be well equipped with fax, telephone and internet facilities. The location of the office should be based on the service it is providing, preferably within the hospital or universities wherein there is provision for resources for multiple disciplines of medicine.

4. Exposure

The center should be accessible to all people including public for its full utilization. Lack of recognition since most people don't understand their role or importance is another reason for not able to function fruitfully. So it is important that people do recognize the importance and have full access to the centre.

5. Quality Evaluation

Even though the center is established and functional, the quality of services provided should be evaluated from time to time. The evaluation should be based upon pre-determined criteria and using quality indicators. The assessment against predetermined criteria, the user satisfaction, health and clinical outcomes can be performed to evaluate the quality of services provided at the DIC.

Drug Information Services In India So Far

With the introduction of six year programme Pharm.D (Doctor of Pharmacy) in 2010, DICs attached to teaching hospitals has increased and more number of pharmacists have started practicing the same. Still there are only few centres providing drug information and therefore the concept has still a long way to go in India.

Bhavsar *et al.* (2012) Conducted a study which revealed that involvement of pharmacy students in ward rounds have resulted in getting more response from the doctors and other health care professionals. When approached by the students for queries the number was high compared to when not approached for queries. It was also seen that the PG students were maximally used for these services. A study in 2014 on initiation of drug information services in the nephrology ward of a tertiary care hospital concluded that the clinical pharmacist participation can be beneficial and can provide improved care to renal failure patients.^[7] In 2015, a study on quality assurance of clinical pharmacy services at JSS college Mysore found that with the implementation of SOP for drug information services the performance has highly improved. The feedback from other healthcare professionals states involvement of clinical pharmacist and their services can be highly useful. They have also recommended involvement of clinical pharmacist in more areas. A study which assessed a pharmacist led drug information service in a tertiary care hospital revealed that these services caters to the need of all health care workers. It also recommended the development of mobile software app for young generation as they don't prefer paper request for queries.^[8]

Lack of quality assessment of services provided is a big issue. The use of quality indicators are suggested for evaluation of performance of DIC. Launching a process to develop and continuously check the standards and the quality of the service, is one step for providing services of the highest possible standards in keeping with the philosophy and mission of the profession.

Keeping in mind of an increasing rise in the use of smartphones, in 2017 JSS College of Pharmacy, Ooty (JSS- DIC) has introduced a mobile app in android for drug information services.

CONCLUSION

There are tremendous opportunities for pharmacists in India to perform in providing drug information. A DIC can be very useful to healthcare workers and patients in a developing country like India. The quality of services should be periodically evaluated for improvement to perform even better. The services of the center can be furthermore expanded to give poison information, research, supporting work of pharmacy and therapeutic committee etc. In a community the DIC can also be used as centre for patient counseling and awareness programmes. In a hospital setting DIC can even perform in ADR reporting, formulary management and promote rational drug therapy. The provision can be extended to industry settings as we have pharmaceutical industries in vast numbers.

From the studies it can be concluded that

1. There is an increasing trend of drug information services in the past 5 years
2. The South Indian states have a more advanced clinical pharmacy settings than the other zones.
3. There should be well defined policies and procedures to conduct drug information services
4. Educational policies should be changed to ensure quality of services provided and additional training is needed.
5. The given services should be evaluated periodically to ensure quality and improvement.

The successful clinical pharmacy settings in south India shows India have a bright future for expanding drug information services. The drug information pharmacist should be adequately trained. With the help of WHO and other organizations government and private hospitals can establish DIC and promote such services for a better health care in India.

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