Drug and poison information centres

The Poisons Information Centre (PIC) is a specialized unit providing information on prevention, early diagnosis and treatment of poisoning and hazard management. Most of the developed and many developing countries have well established poison control centres with poisons information service, patient management facility and analytical laboratory. Poison information service also deals with the risk assessment, diagnosis, management and prevention of exposure to any poison, in patients of any age irrespective of type (intentional or accidental) and route of exposure. The primary aim of PIC is to reduce the morbidity and mortality due to poisoning and improve the patient's quality of life. In India, the National Poisons Information Centre (NPIC) was established in February, 1995 in the Department of Pharmacology at the All India Institute of Medical Sciences, New Delhi.

The centre gives toxicological information and advice on the management of poisoned patients adapted to the level of the enquirer. The basis of this service is the databases on poisoning, drug reactions and also the continuous and systematic collection of data from the library.

Poison Information resources (PIRs)

PIRs are of different types including primary, secondary, tertiary resources. Poison information specialist should have searching and evaluation skills in all type of resources to provide correct and relevant information

Primary resources: They include journals of medicine and toxicology, for the updated and recent advances in a particular area. Apart from these resources it is important to develop educational material such as posters on the safe use of pesticides and chemicals, booklets and leaflets on safe storage of medicines and house hold products at home, and the treatment protocols of the most common type of poisoning for clinicians, certain journals that are used as primary resource are

1 British journal of industrial medicine, Published by British Medical Association, London, England.

2 Drug safety (formerly Medical toxicology), Published by ADIS Press, Auckland, New Zealand.

3 EHP (Environmental health perspectives), Published by US Department of Health and Human Services, National Institute of Environmental Health Sciences, Research Triangle Park, NC, USA.

4 Human and experimental toxicology, Published by Macmillan, Basingstoke, England.

5 Adverse drug reactions and toxicological reviews, Published by Oxford University Press, Oxford, England.

6 American journal of industrial medicine, Published by Wiley, New York, NY, USA.

7 Annals of occupational hygiene, Published by Pergamon, Elmsford, NY, USA.

8 Archives of environmental contamination and toxicology, Published by Springer Verlag, New York, USA.

9 Archives of environmental health, Published by Heldref (Helen Dwight Reid Educational Foundation), Washington, DC, USA.

10 Archives of toxicology, Published by Springer Verlag, Berlin, USA.

11 Biochemical pharmacology, Published by Pergamon, Elmsford, NY, USA.

12 Journal of the American Industrial Hygiene Association, Published by American Industrial Hygiene Association, Akron, OH, USA.

13 Journal of toxicology - clinical toxicology, Published by Marcel Dekker Inc., New York, NY, USA.

14 Pharmacology and toxicology, Published by Munksgaard, Copenhagen, Denmark.

15 Neurotoxicology, Published by Raven Press, New York, USA.

16 Toxicology, Published by Elsevier, Limerick, Ireland.

17 Toxicology letters, Published by Elsevier, Amsterdam, Netherlands.

18 Toxicology and applied pharmacology, Published by Academic Press, San Diego, CA, USA.

19 Toxicon, Published by Pergamon, Elmsford, NY, USA.

20 Veterinary and human toxicology, Published by Comparative Toxicology Laboratories, Manhattan, KS, USA

Secondary sources: Database such as Poisindex, Hypertox, Intox and Toxinz are must for the retrieval of quick and updated information. Many of the countries have their own databases for the products available in their region. However, the countries which do not have such databases can select the specific and relevant database which fulfils their needs. Many databases are available both on line and on compact disc format (CDROM). The examples of secondary resources include

1 Poisindex

2 Hypertox

3 Toxbase

- 4 Intox
- 5 Toxinz
- 6 Toxline
- 7 Toxnet
- 8 Toxicon

Tertiary resources: It includes the standard textbooks of medicine (general and pediatric), chemistry, pharmacology, analytical toxicology and animal and plant toxins of the region and standard medical dictionaries are essential. List of the medicines, agricultural and other chemical products and their ingredients available in the local market and also the local pharmacopoeia should also be present.

1 Lindsay Murray, Frank Dary, Mark Little, Mikes Cadogan. editors., Toxicology handbook. Australia: Churchils Livingstone, Elsevier; 2007.

2 Richard C drat, Katherine, Hurlbut, Edwin, Kuffur, Luke Yip. The 5 minute Toxicology consult., current edition. Philidelphia: Lippincott Williams and Wilkins; 2001.

3 Timothy B Erickson, William R Athrens, Steven E AK, Cart, K Baun, Louis J Ling.. editors., Pediatric toxicology diagnosis and management of the poisoned child. USA. Mcgraw-Hill; 2005.

4 Kent, Olson. editors., Poisoning and drug overdose. Mcgraw-Hill companies. 2004.

5 Oserhoudt, Perrone, Derros, Henvetic. editors., Toxicology pearls: Philidelphia. Hanley & Belfus.2004.

6 Ellenhorn MJ, Schonwald S, Ordog G, Wasserberg J. editors., Elenhorns medical toxicology diagnosis and treatment of human poisoning current edition, Baltimore: Williams and Wilkins; 2006. 7 Baselt RC, Cravey RH. Disposition of toxic drugs and chemicals in man, Shanmuga Sundaram et. al., Am. J. PharmTech Res. 2014; 4(5) ISSN: 2249-3387 5 www.ajptr.com 3rd ed. Chicago, Year Book Medical, 1989.

8 Dreisbach RH, Robertson WO. Handbook of poisoning: prevention, diagnosis and treatment, 12th ed. Los Altos, CA, Appleton & Lange, 1982.

9 Goldfrank LR et al. eds. Goldfrank's toxicologic emergencies, 5th ed. Norwalk, CT, Appleton & Lange, 1994.

10 Indian Pharmacopoeia, 5th ed. 2007.

11 United States of Pharmacopoeia 36 - National Formulary 31. 2013.

12 British National Formulary, 66 edn. 2010.

13 Gossel TA, Bricker JD. Principles of clinical toxicology, 3rd ed. New York, Raven Press, 1984.

14 Gosselin RE, Smith RP, Hedge HC. Clinical toxicology of commercial products, 5th ed. Baltimore, MD, Williams & Wilkins, 1984.

15 Haddad LM, Winchester JF, eds. Clinical management of poisoning and drug overdose, 2nd ed. Philadelphia, Saunders, 1990.

16 Klaassen CD, ed. Casarett and Doull's toxicology: the basic science of poisons, 5th ed. New York, McGraw-Hill, 1996.

17 Noji EK, Kelen GD, eds. Manual of toxicologic emergencies. Chicago, Year Book Medical, 1989.

18 Clayton GD, Clayton FE, eds. Patty's industrial hygiene and toxicology, Vols 2A, 2B, 2C, 2D, 2E, 2F, 4th ed. New York, Wiley, 1993-1994.

Advantages of Poison Information resources (PIRs)

Reduction in overall cost of operation Combined programs share personal, information resources, space and utility charges Improved access to information services Poisoning can be controlled at speed It helps in providing round the clock services Speedy access to literature search and evaluation skills

Disadvantage Poison Information resources (PIRs)

The prime disadvantage is a single staff is involved that can place pressure on the poison information provider.