Introduction

“Poison information centre (PIC) is a specialized unit providing information on poisoning management and playing a role in teaching and training programmes, conducting research and managing a database regarding poisons.” The PIC established by JSS College of Pharmacy, JSS University, Mysore is located at the Department of Clinical Pharmacy, JSS Hospital, Mysore. The PIC functions on all week days from Monday to Saturday between 9am-5pm. Well trained staff of the PIC provide information on management of various poisoning cases. Information will be provided through telephone, fax, e-mail and in person as per the enquirers request. The PIC is equipped to provide the latest information on poisoning due to a variety of products including household items, agricultural and industrial chemicals, drugs, environmental toxins (plants, animal bites and stings) and other miscellaneous products. The PIC will maintain the records of all the queries received.

Vision

Committed to provide timely and accurate poison information services

Mission

The mission of the PIC is to improve the health of the public by minimizing morbidity, mortality due to poisoning and also by minimizing or preventing poisoning.
Objectives

- To improve the health care by providing poison information service regarding management of poisoning to healthcare professionals and first aid measures to public.
- To prevent poisoning incidences by creating awareness and educating the public regarding proper storage and safe handling of the poisoning substances.
- To minimize the unnecessary visits to the hospital by identifying severity of the cases.
- To minimize the cost of the treatment by providing appropriate management of poisoning.

Strategies:

➢ Provision of information and advice
  - To provide timely and appropriate information to meet the needs of the enquirer in the management/prevention of poisoning.
  - To provide information on all kinds of poisoning affecting people of all ages.
  - To provide information and advice on prevention or minimization of unnecessary visits to doctors and hospitals by identifying suitable cases (mild or less severe).
  - To decrease the costs associated with the treatment /management of poisoning.
  - To ensure that the patients who are poisoned receive the most effective treatment by providing timely, up-to-date information regarding poisoning management to health care professionals.

➢ Toxicovigilance
  - Toxicovigilance is the active process of identifying and evaluating the toxic risks existing in the community, and evaluating the measures taken to reduce or eliminate them.
  - The PIC will conduct toxicovigilence studies to identify and minimize the toxic risks exist in the community
Annexure II

➢ Education

- To educate and create awareness among the general public regarding recognition the poisoning agent, prevention of poisoning and first aid measures.

➢ Research

- To carry out research in the area of poisoning to identify and evaluate the toxins, elucidate the mechanisms, develop novel diagnostic and therapeutic techniques.

Extent of service

Initially the service will be provided to healthcare professionals and general public of Mysore city and later depending upon the need for service, the service will be extended to the healthcare professionals and general public of entire Mysore district.

Working hours

Initially the PIC will operate on all working days (Monday to Saturday) between 9 am and 5pm. Later the service may be extended round the clock on all days. However, calls received after office hours will be directed to one of the poison information specialists.

Cost of service

Poison information will be provided at free of cost to the public and healthcare professionals.

Staffing

There is adequate number of staff working in the PIC. The minimum required qualification for the technical staff is B.Pharm/ Masters in basic science. Training will be imparted to the new staff regarding handling of calls and service provision. The trained staff will be allowed for handle the poison information queries independently. The poison information specialist who is on duty will provide the information.
Responsibilities of the poison information specialist:

- Provision of poison information
- Preparation of standard poison information protocols
- Maintaining accurate record of all queries related to poison information
- Participation in continuing education program
- Updating and maintaining information resources
- Conducting research in the area of poison management
- Educating the general public regarding the safe handling of poisonous substances especially pesticides and household products to prevent poisoning

**Handling Calls**

The aim is to identify those exposures that are potentially serious and require immediate medical assessment and those that represent a minimal risk of toxicity. By identifying exposures that represent a minimal risk of toxicity, unnecessary presentations to doctors and hospital emergency departments can be avoided, and callers can be reassured as quickly as possible. For each call, the pharmacist must assess the call by carefully listening to the caller and asking open-ended questions. Often the information provided by the caller is insufficient to give an accurate answer; in such cases further targeted questions should be asked. The pharmacist taking the call must make a decision based on the information given by the caller, an assessment of the reliability of the history, their own clinical judgment and the information retrieved from the available sources.

1. **General technique of handling calls**
   1. Establish rapport by a professional, but friendly approach.
   2. Check interpretations by repeating findings.
   3. Probe for missing information.
   4. Allow the caller sufficient time to complete statements.
   5. Use direct and open-ended questions appropriately.
   6. Provide reassurance.
   7. Use appropriate terminology.
   8. Offer to call back if the information might take a while to obtain, especially if immediate first-aid is required and the caller is asked to observe its effects.
2. Collection of background information.

To provide appropriate information the pharmacist needs relevant background information. Basic information required includes:

1. Name of the substance or product
2. Age and weight of patient
3. Route of contact (ingestion, inhaled, dermal, etc.)
4. Quantity and/or strength involved
5. Time since exposure
6. Patient's condition (signs, symptoms, etc.)
7. Treatment already given
8. Health status of patient including medication history, allergies, relevant pre-existing conditions

Obtaining information sometimes requires targeted questioning. For example to get an estimate of the number of tablets involved, the caller may need to count the remaining tablets and subtracting from the number of tablets originally present in the container. It may be appropriate to ask the caller if they have the original container there, and to bring it to the phone. Take extra care to accurately identify any substance that is not in its original container, example a herbicide, cleaner etc.

3. Medical assessment

The caller should be told whether medical assessment is required or not. Medical assessment is required in all cases of intentional exposure, in those who have been exposed to a significant amount of a toxic substance, or who have significant symptoms (regardless of whether they are related to the exposure), or those who are at a greater risk of toxicity because of age or existing medical condition.

In cases involving therapeutic errors, some factors to be considered before deciding if medical assessment is indicated include: the age and medical condition of the patient; the patient’s normal dose, how long they have been taking that dose and how well that dose has been tolerated; whether there is anyone staying with the patient or whether he/she is alone; whether the dose ingested is within the ‘normal’ therapeutic range; any interactions between the medicines that have been taken in error and the patient’s usual medications.
Callers who need gastrointestinal decontamination should be advised to seek medical attention at a hospital. If urgent assessment and treatment is required, the caller should be directed to the emergency department of the nearest appropriate hospital, via ambulance if necessary. If non-urgent assessment is required, it may be appropriate to refer the caller to a general practitioner. Callers should be alerted to any obvious signs and symptoms that may develop, which would indicate that a significant exposure has occurred and requires medical assessment. It is inappropriate for callers to wait for signs and symptoms of poisoning to occur before seeking medical assessment. When there is doubt, callers should be told to seek medical assistance if there is a chance that a potentially significant exposure has occurred.

4. Retrieval and provision of information
The information will be retrieved from in different resources like standard treatment protocols, Poisindex, books and journals and the appropriate information will be provided to the caller. The information to the health care professionals will also be provided in printed form by hand or mail, e-mail or fax on request.

The information provided is based on the following aspects.

1. The urgency of the situation
   (a) Emergency
   (b) Serious
   (c) Not serious
   (d) No problem

2. Assessment of the situation
   (a) Check the toxicity of the agent
   (b) Assess the likelihood of toxicity associated with the exposure
   (c) Determine appropriate management
   (d) Provide information to caller

3. What action to be taken may be one or a combination of:
   (a) First aid
   (b) Medical assessment, with details of what type (local doctor or hospital)
   (c) Observation
   (d) Home treatment
   (e) No treatment necessary
(f) Reassurance

5. Resources

The following resources are used.

1. Treatment protocols for the management for the management of poisoning.
2. The Micromedex (Poisindex) system enables rapid retrieval of information on poisonings by chemicals, drugs, plants, as well as providing information on identification of therapeutic substances.

6. Confidentiality issues relating to call handling.

The details of the caller should not be disclosed to any one including family members and health care professionals without the consent of the caller.

7. Follow-up of calls

Follow-up calls should be made at the discretion of the pharmacist on duty, according to their own judgment and workload. A reassurance call is better handled by the pharmacist who took the original call. If necessary, the pharmacist should inform the next pharmacist on duty that a follow-up call is required. The timing of follow up on the basis of individual case and call should be made as appropriate.

8. Documentation

All the details pertaining to poisoning and poisoning query including caller details will be documented in the hard and soft copy of poison information documentation form. The poison information documentation forms should be stored for minimum 3 years.

Quality assurance

Quality assurance of the services provided will be assessed by different means including obtaining feedback from users through questionnaire survey, reviewing and evaluation of services against predefined standards / checklist and peer review of answered queries by the experts.
QUALITY POLICY

Quality improvement

The PIC will be committed to the delivery of high standards of service and the continuous improvement and development of the service. A meeting will be conducted by the staff of PIC, once in three months to discuss and take decision on corrective actions and quality improvement strategies regarding complicated enquires /cases, any complaints to PIC, statistics of hospitalized poisoning cases, need for review of management protocols, educational activities and prevention of poisoning cases.

The poison information centre will maintain its quality by adopting the following strategies.

- Providing accurate, relevant, up-to-date advice
- Showing empathy to callers
- Responding to client needs identified through regular client surveys
- Maintaining confidentiality in relation to callers and formulated information
- Referring callers to other agencies or sources of information when appropriate
- Providing the service in an efficient and cost-effective manner
- Making potential users aware of our service
- Encouraging the poison information specialist to increase their skills
- Providing adequate training to the PIC staff
- Ensuring adequate facility including information services at the centre

Legal issues

Staff of PIC have a moral duty, to help someone whose life is in danger. Staff does not hold a legal responsibility to ensure someone who has taken a potentially life-threatening overdose neither gets treatment nor for the death or morbidities associated with poisoning.

Complaints about the service

The complaint can be either written or verbal. If the staff of PIC receiving the complaint resolves the issue at the time, no further action is required. If the staff is unable to resolve the issue, then the person making the complaint should be advised that the matter will be referred to the Head of the Department. The complaints should be referred to the Head of the Department who investigates the circumstances of the complaint and tries to resolve the complaint to the satisfaction of the complainant. Every effort will be made to achieve resolution of the complaint to the satisfaction of the complainant.