



SGH News

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SGH Launches One-stop Drug & Poison Information Centre

In attending to patients with poisoning and adverse drug reactions, every second counts as early identification of the cause and prompt treatment are key to improved outcome.

A centralized Drug and Poison Information Centre (DPIC) has been set up at the SGH Department of Emergency Medicine. The project, which is funded under the Ministry of Health's Health Service Development Programme (HSDP), is designed to provide information to healthcare professionals and members of the public on the signs and symptoms of poisoning, as well as treatment in acute cases.

A Need for Centralised Information

In a study conducted by the SGH Department of Emergency Medicine in 1998, it was found that side effects from drugs and allergic reactions to medications were two problems commonly encountered by healthcare professionals. Alcohol-related problems, adverse effects of traditional medicines, poisonings and drug reactions formed the rest of the drug and toxicological problems commonly seen by physicians in their practice.

In another earlier study, the department also found that most physicians, including General Practitioners, were keen on managing poisoning and adverse drug reaction problems if they have access to the necessary information and resources. Currently, healthcare professionals refer to the Drug Information Services available at the six public hospitals and the Poison Information Centre at the Health Sciences Authority, which together manage a total of 1,500 enquiries on drugs and poisons each year. The decentralised information hub means that many instances of poisoning are managed locally with varying consequences in terms of morbidity, and most adverse reactions are often not reported, making it difficult to identify and recognise trends, especially in cases of mass poisoning.



"The two studies highlighted the need for a centralised drug and poison information resources to assist physicians in better managing their patients," explains Dr R Ponampalam, Consultant at the SGH Department of Emergency Medicine and Director of the project. "This provided the impetus to set up a single, 24-hour centralised information bureau - a one-stop resource centre for drug and poison information at just a phone call away."

"With the establishment of the Drug and Poison Information Centre, we hope to provide a timely and safe information service appropriate to the caller, which will in turn help to reduce the time needed for the diagnosis and treatment, especially for poisoned victims," Dr Ponampalam elaborates.

The DPIC is manned round the clock by Poison Information Officers backed by a team of experienced drug information pharmacists and clinical toxicologist, offering information on both poison and drug-related problems.

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The Poison Information Services provide information on toxicity, signs and symptoms and treatment of poisoning, helping callers answer enquiries on subjects ranging from poisonings involving medicines, household commodities, agricultural chemicals, industrial chemicals, cosmetics to poisonous plants and insects. The Drug Information Services will assist callers with details on drug identification, side effects and interactions, as well as dosage and formulation, among others.

The Poison Information Officers are also trained to offer professional consultation to healthcare professionals to help them make clinically sound judgement in managing cases of poisoning. They can also provide instructions in the first-aid management in the event of a poison emergency.

Response Time

While the service is available round the clock, seven days a week, Dr Ponampalam emphasises that priority will be given to calls associated with emergency poison cases as well as enquiry from healthcare professionals on poisoning management. This is because one of the objectives of the service is to reduce unnecessary visits and referrals to the Emergency Departments and also to ensure rapid optimum treatment for cases of poisoning. Depending on the complexity of the information required, the DPIC has set the benchmark for estimated turnaround time for complete information within 15 minutes for 80 per cent of the call load.

Another important role for the DPIC is that of education, which according to Dr Ponampalam, is critical in increasing public awareness of poisoning. "The most effective way to address poisoning is through prevention," he shares, adding that relevant education programmes for healthcare professionals and the general public on poisoning are in the pipeline.

The centre hopes to conduct poison prevention activities such as poison awareness talks and campaign on toxic safety for members of the public. Talks and workshops on clinical toxicology, poisoning epidemiology, poisoning prevention, and diagnosis and management of poisonings will enable general practitioners and specialists to better manage a variety of poisoning and adverse drug reactions. Dr Ponampalam is also working on setting up a website with basic information on poisoning and adverse drug reactions, as well as resources that will be available locally and internationally in dealing with related matters.

In addition, the DPIC also hopes to collect and disseminate accurate relevant statistics on poisoning by conducting toxic surveillance on exposures through collating calls logged at the centre. These statistics will be used to identify trends in poisoning or toxic clusters or incidents of mass poisoning. It will also help to identify areas in which preventative measures need to be taken, or where additional educational activity is required. ■

What you should know about Poisoning & Adverser Drug Reaction

POISONING

The SGH Emergency Department handled close to 500 cases of toxic exposures in 2002. Of these:

- more than 50% were females
- the majority of poisoning victims were Chinese, who formed about 65% of such cases
- an estimated one in two toxic exposure incidents occur in the home
- 81% of toxic exposure cases involved only a single toxin or drug
- 66.7% of poisoning cases involved poison ingested orally
- more than 50% of the poisoning cases were accidental

ADVERSE DRUG REACTION

More than 1,300 cases of adverse drug reactions were seen at the SGH Emergency Department between 2001 and 2002.

- About 300 patients are Type A adverse drug reaction cases caused by side-effect of medications
- The remaining 80% developed adverse drug reactions as a result of allergic reaction
- Women formed the majority of adverse drug reaction cases
- One third of the adverse drug reactions incidents involved analgesics or painkillers
- Antibiotics were the cause for one-fifth of the adverse drug reactions cases
- 75% of these patients were treated as outpatients, with majority not requiring any follow-up

GUIDELINES FOR EMERGENCY RESPONSE TO POISONING

FIRST AID FOR POISONINGS

Always call the Drug and Poison Information Centre at **Tel: 6423 9119** immediately for emergency medical assistance. When calling the DPIC:

- Identify yourself and give your relationship to the patient. Give your phone number in case your call is disconnected.
- Describe the patient by name, age, gender and weight.
- If possible, have the container or poison in your hand and identify as best you can:
 - What was taken?
 - When was it taken?
 - How much was taken?
 - How is the patient acting?
 - Be prepared to answer any questions asked.
- Follow the advice given by the Poison Information Officer.

FOR POISONING BY SWALLOWING

1. Check and monitor the victim's airway, breathing and circulation. If necessary, call the emergency ambulance services 995 and begin rescue breathing and CPR.
2. Try to ascertain if the victim has indeed been poisoned. Some signs include chemical-smelling breath, burns around the mouth, difficulty breathing, vomiting, or unusual odours on the victim. If possible, identify the poison.
3. Do not induce vomiting.
4. If the victim vomits, protect the airway. If you must clear the victim's airway, wrap a cloth around your fingers before cleaning out his or her mouth and throat. If the victim has vomited a plant part, save the vomitus as it may allow identification by an expert who can then determine an antidote.
5. Reassure the victim and keep him or her comfortable. Position the victim on their left side while getting or awaiting medical help.
6. If the victim starts having convulsions, protect him or her from injury.

POISON ON THE SKIN

1. Brush off any dry poisons and flood the involved parts with large amounts of plain water.
2. Wash the skin with soap and water and rinse.
3. Remove and bag and seal all affected clothing.

POISON IN THE EYE

1. Irrigate the patient's eye with water continuously for 15 minutes in the direction away from the unaffected eye.
2. Use plain lukewarm water.
3. Do not allow the victim to rub his/her eyes.

POISON PREVENTION

- Be aware of poisons in and around your home. Take precautions to protect young children from toxic substances. Store all medicines, cleaners, cosmetics, and household chemicals out of reach of children, in locked cabinets or in cabinets with child-proof latches.
- Be familiar with plants in your home, garden and vicinity. Keep your children informed too. Remove any noxious plants. Never eat wild plants, mushrooms, roots, or berries.
- Teach children about the dangers of substances that contain poison. Label all poisons.
- Do not store household chemicals in food containers, even if they are labelled. Most non-food substances are poisonous if taken in large doses.

DPIC

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