

EDITORIAL

Toxicovigilance - the need for concern

It is not unusual to read in newspapers about the occurrence of accidental food poisoning and fatalities following it; events like large numbers of school children taken ill after eating "nasi lemak", guests falling sick after a wedding feast, workers getting sick and dying after consumption of illicit brew, a kampong family taken ill after eating a tapioca meal and in more recent times the tragedy involving children attributed to the eating of noodles in Perak. Food poisoning continues to be an important problem and when highlighted by the press and consumer organisations moves the authorities concerned into taking remedial actions.^{1,2} Acute poisoning is one of the important causes for hospital admissions. In 1988, about 4000 cases of poisoning required hospitalisation. One out of eight such cases had a fatal outcome despite vigorous treatment.³

Another category of poisoning usually highlighted by consumer groups involves larger numbers of individuals and is attributed to the use of pesticides in agriculture and environmental hazards with its accompanying adverse consequences on health. The adverse effects of chemicals on the environment is also an issue of great public health concern globally. With development, chemical products have become important in industry, agriculture, households and in medicine. Pesticides play an important role in agriculture production in Malaysia. The increased usage as well as the use of more potent insecticides in larger dosages poses health hazards to those using them as well as our environment. It is not surprising that poisoning by pesticides remains high amongst the poisoning cases. Annually there are about 300 deaths due to pesticides.³ A look at the number of 'paraquat' poisoning cases shows an alarming rate of increase.⁴

Many of the suicides or attempted suicides are with chemicals used in agriculture including pesticides. In a recent study⁵ 58% of the respondents in estates said that they handled pesticides daily and 54% of respondents reported experiencing poisoning symptoms. Some of the unfavourable findings highlighted included the inadequate provision of respirators and protective clothing to workers, inadequate or no training in the handling of pesticides, inadequate provision and supervision of necessary medical facilities including medical examination of workers.

The high incidence of poisoning emphasises the need to create greater awareness of the problem and measures to deal with it. The prevention of poisoning requires adequate knowledge of the hazardous properties of substances by the users. It is encouraging to know that there is currently an increasing awareness amongst consumers about the poisons present in the products they are exposed to. This may to some extent prevent misuse of chemicals and accidents with chemical exposures leading to adverse health effects.

It goes without saying that workers in hazardous occupations must be medically assessed regularly as a check against faulty control measures and this should include blood and urine analysis at centres with adequate facilities and expertise. The need for proper supervision and provision of necessary medical facilities must also be given due importance by all employers. Education of consumers on the safe storage and use of household poisons is equally important. The prevention of contamination of foodstuffs by proper safety measures as well as the enforcement of food regulations would lessen the chances of food poisoning. Problems related to chronic poisoning deserve more attention:— the provision of adequate monitoring facilities of the working environment, the control of pollution and the disciplining of polluting industries. All these would ensure that the air we breathe and the water we drink are free from pollution.

In this context it is necessary to reiterate that chemical carcinogenesis is important and some diseases are occupation related.

The diagnosis and evaluation of poisoning poses a number of problems. The identification of the incriminating agent may not be difficult in cases of exposure to known poisons or those substances that may be poisonous. This is useful for management. However, many preparations do not list the ingredients on the label, particularly the non-proprietary preparations and "medicines" sold by traditional healers and roadside peddlars. In any disease state of unknown origin, poisoning has to be considered as part of the differential diagnosis.

In the management of poisoning there is a need for emergency treatment, doctors must be able to give appropriate treatment immediately. Since poisoning requires emergency treatment, drugs and equipment for the various procedures must be readily available in the treatment centres along with persons conversant with their usage. There is a need for definitive treatment and protocols. This is where there is a role for functioning poison information centres. Currently, except for one or two major hospitals in the country, the facilities are inadequate to deal with large numbers of poisoning cases especially when the incriminating toxin cannot be identified.

It is hoped that the recently concluded meeting and workshop on "Prevention and management of poisoning by toxic substances" in Kuala Lumpur³ would augur well for various preventive measures as well as the establishment of centres for the effective diagnosis and management of poisoning. We also need the establishment of regional centres with adequate laboratory facilities for the identification of toxic substances, library and information facilities, and specialised clinical facilities for the management of poisoning cases; all backed by adequate resources. Perhaps the medical schools in the country, with their resources and expertise should strengthen their facilities to deal with poisoning cases. In this effort the resources and expertise of the industry and other divisions in the Universities should also be enlisted.

As a nation we have made remarkable progress in various public health programmes and it is only opportune that specialised facilities be developed to deal with health problems related to poisoning and environmental hazards.

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References:

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