

EDITORIAL

CHILDHOOD POISONING

The present editorial was prompted by an article in this issue of the journal by Mukungu *et al.* in which they describe a case report on *Jatropha curcas* poisoning in Kenya. Childhood poisoning results from interaction between three variables, namely the child, poison and the environment. From different permutations of these variables, one can arrive at different scenarios. Different geographical habitats (urban or rural) as well as age groups are important determinants. However, there are some common factors which allow for generalization. For example, most cases of poisoning occur in children below six years of age with the peak being around one to three 3 years of age. Curiosity and desire to taste is common in this age group with boys much more affected than girls. Most cases of childhood poisoning are unintentional. Occasionally children become collateral victims in parental feuds when one parent poisons the children before committing suicide.

Another observation is that approximately 90% of reported poisoning cases involving children below six years of age occur within the home environment and predictably involves household agents (cosmetics, personal care products, cleansing agents, etc). Self medication products such as cough remedies, analgesics and iron salts also contribute to poisoning in children. Children below six years old and especially one to three year olds are constantly under observation by the parent or caregiver. This ensures that symptoms of poisoning are detected early at the subacute stage and the necessary intervention instituted. Consequently, most cases of poisoning in children are rarely fatal.

Much of the published literature on poisoning is from the developed world (USA, European countries, Australia and Canada) and reflects the situation in urban areas where plant poisoning is relatively unimportant. Overall, plant poisoning accounts for about 3% of all cases reported. Data from rural areas in Africa is unreliable because poisoning cases are rarely reported. Those cases of poisoning reported in print and electronic media such as the one cited by Mukungu *et al.* are rarely captured in scientific literature. Many of the cases occurring in rural areas are actually not reported in news media because the subacute symptoms (nausea and vomiting) often resolve without medical intervention.

One less publicized source of childhood poisoning is herbal medicine. Traditional medical practitioners believe that herbal medicine cannot cause poisoning because it is natural. This is obviously a fallacy. For example it is believed that when a child starts vomiting after being given a herbal decoction, it is evidence that the medicine is working. Fortunately fatality is rare and in the unlikely event that death occurs, the herbalist will attribute this to the disease rather than to his/her intervention.

The case of *Jatropha curcas* poisoning described by Mukungu *et al.* fits into a typical childhood poisoning profile. One or more children find brightly coloured fruits or berries which are palatable and invite others to eat. Due to peer pressure and herd mentality, the others agree. Within a short period their parents observe subacute symptoms of nausea and vomiting and rush the children to a health care facility where they are given supportive or symptomatic treatment.

In this particular case, symptoms are due to curcin, a toxalbumin, which is a potent gastrointestinal irritant. It is not surprising that although *Jatropha curcas* has caused poisoning in other parts of the world, no death has been reported.

**Prof C.K. Maitai,
Editor-in-Chief.**