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Deadly paediatric poisoning

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Many paediatric ingestions are non-toxic but it is important to be aware of pharmaceuticals, chemicals and plants that can have serious toxicity in small amounts. Fatal and non-fatal poisonings are strongly associated with lower socioeconomic status, between and within countries.

It is commonly believed that ingestion of 1 -2 tablets in a toddler is benign. This holds true for many medications except for a few which can be fatal even in small doses. Ingestion of 1 – 2 dose units of tricyclic antidepressants, antipsychotics, quinine derivatives, calcium channel blockers, opioids, theophylline, oral hypoglycaemics, camphor and methyl salicylate have been responsible for majority of deaths in surveillance studies in developed countries. In the Asia-Pacific region farming practices and easy access to toxic chemicals like paraquat, organophosphates, kerosene and household cleaning products containing corrosive agents, cause significant morbidity and mortality in children. Depending on the locality, children may get exposed to different plants containing toxins such as cardiac glycosides, colchicine and strychnine.

The age of the child generally determines the toxic exposure and its effects. Children between ages 1 to 4 years have the highest exposure rates to due to their exploratory behaviors. The rate of fatal poisoning is highest for children under one year, with another slight peak around 15 years. Poisoning in children should also alert the clinician to non-accidental poisoning.

Prevention of paediatric poisoning is based on public awareness, parental education, safety legislation and special labelling of drugs and chemicals that are fatal to children in small doses. Poison prevention measures like use of child-resistant packaging, replacing caps tightly after use, locking up all medicines and chemicals out of sight and reach of children, are important. Poisons information centres worldwide play a vital role in leading public awareness campaigns regarding toxic paediatric ingestions.