THE THREE MAIN GROUPS OF PHARMACEUTICAL AGENTS INVOLVED IN POISONING CASES REPORTED TO THE NPC OF MALAYSIA OVER A 5-YEAR PERIOD (2006-2010)

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Objective: The aim of the study was to review the trend of poisoning cases involving pharmaceuticals reported to National Poison Centre of Malaysia between 2006-2010.
Method: The study utilised data recorded in the poisoning cases report (PCR) using pharmaceutical classification based on the IPCS-INTOX data management system. Data referring to age category, gender, route of exposure and incident type were analysed in all reported cases of pharmaceutical poisoning. SPSS version 15.0 was used in data analysis.
Result: Descriptive analysis of the data shows that 35% (N=5062) of the poisoning cases recorded involved pharmaceuticals. Of these, three groups were identified to be the agents responsible for most of the poisoning cases. They are, psychiatrics (21%), topical agents (18%) and analgesics (14%). For topical agents, most of the poisoning cases recorded involved children (45%), followed by adults (42%) and adolescents (12%). More than half of these cases were accidental and almost all (98%) were through ingestion. Both genders were almost equal in number in the recorded poisoning cases. Accidental poisoning cases by topical agents was highest in children (65%) and intentional poisoning was highest in adults (70%), followed by adolescents (24%) and children (9%). In poisoning cases involving psychiatric agents, adults stood the highest (74%), while children and adolescents were 15% and 8% respectively. Intentional poisoning was the main occurrence (80%) and almost all (99%) through ingestion. In terms of genders involved, females were more than males with 49% versus 36 %. Most of the intentional poisoning cases were in the group of adolescents (87%), followed by adults (10%) and children (3%). Among all the psychiatric drugs recorded, three agents were identified as the top agents responsible for the poisonings: Haloperidol (9%), Alprazolam (8%) and Chlorpromazine (7%). Most cases involving analgesics were among adults (55%) while both adolescents and children recorded almost the same number of poisoning cases (20%). In all incidents, intentional poisoning was higher compared to accidental poisoning, 77.6% versus 21.4%. Intentional poisoning was higher in adults (67%) followed by adolescents (25%) and children (6%). Accidental poisoning was recorded to be highest among children (80%), followed by adults (12%) and adolescents (6%) . Among the analgesics, Paracetamol (acetaminophen) was the main drug involved (44.6%), followed by Mefenamic acid (20%), Diclofenac (6%), Tramadol (6%), Aspirin (1.5%), and Ibuprofen (1%).
Conclusion: Emphasis should be given into enhancing public education on the risks of pharmaceutical poisoning in households especially involving children.