PP - 021

Patterns of acute poisoning with kerosene oil, paracetomol, and Jatropha circus among children in rural Sri Lanka

Dr. MBKC Dayasiri[1], Dr.SF Jayamanne[2], Dr. YC Jayasinghe[3]

[1.] *University Paediatric Unit, Teaching Hospital, Peradeniya*

[2.] *Department of Clinical Medicine, Faculty of Medicine, University of Kelaniya*

[3.] *Department of paediatrics, Faculty of Medicine, University of Kelaniya*

Abstract

Objective: Kerosene oil, paracetomol and Jatropha circus are the commonest substances implicated in acute poisoning of children residing in rural Sri Lanka.This prospective study identifies the patterns of acute poisoning with the respective poisons including demographic characteristics, nature, type and the location of poisoning. It also identifies first aid measures practiced by the public and their detrimental effects, complications and outcome after the poisoning event.

Methods: All children presented acutely with a history of either intentional or unintentional poisoning with kerosene oil, paracetomol and Jatropha circus to the emergency department of Anuradhapura Teaching Hospital were included in the study. Data were collected using structured clinical interviews over a period of two years extending from February 2012 to January 2014.

Results: Among 133 children recruited to the study, majority were between 2 – 4 years (67; 50.4%). Male to female ratio was 78 (58.6%): 55 (41.4%). 249 Children (65%) were transferred from 40 peripheral health care institutions. Commonest poison was kerosene oil (79; 59.4%) and Jatropha circus and paracetomol each accounted for 27 (20.3%) poisoning events. Most had unintentional poisoning (132; 99.2%) and within their own house premises (127; 95.4%). Most events of kerosene oil, paracetomol and Jatropha circus occurred in kitchen (77, 97.5 %), bed room (17, 63%) and home garden (26, 96.3%) respectively. First aid measures were practiced on 39 children (29.3%) by their care givers and commonest measure was serving of coconut water to facilitate induction of vomiting (17; 43.6%). There were four incidents of aspiration pneumonia following kerosene oil poisoning as detrimental effects of first aid measures, and guardians were unaware of these effects in all cases. Commonest initial symptoms following kerosene oil, paracetomol and Jatropha circus ingestion

were cough, shortness of breath (79, 100 %), and vomiting (22, 81.5%, 23, 85.2%) respectively. Complications were observed in 20.3% and commonest complications following kerosene oil, paracetomol and Jatropha circus were chemical pneumonitis (16), acute hepatic injury (10), and convulsions (1) respectively.

Conclusions: Victims of acute poisoning with kerosene oil, paracetomol and Jatropha circus are predominantly pre-schoolers, and male children are at a higher risk. They are poisoned mostly unintentionally and within their own housing premises. Kerosene oil is the commonest poison with its additional risks of aspiration pneumonia following hazardous first aid measures by care givers. The three poisons showed patterns with regard to location of poisoning, caregivers' choices of first aid measures, initial symptoms and subsequent complications. The complications are potentially preventable through community education regarding these patterns and avoidance of harmful first aid practices.