

POPULATION ATTRIBUTABLE RISK OF UNINTENTIONAL CHILDHOOD POISONING IN KARACHI PAKISTAN

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Introduction The percentage of unintentional childhood poisoning cases in a given population attributable to specific risk factors (ie, the population attributable risk) was calculated as they are necessary to focus on the prevention strategies.

Methods We calculated population attributable risks (PARs), using 120 cases with unintentional poisoning and 360 controls in a hospital based matched case- control study. The risk factors were accessibility to hazardous chemicals and medicines due to unsafe storage, child behaviour reported as hyperactive, storage of kerosene and petroleum in soft drink bottles, low socioeconomic class, less education of the mother and the history of previous poisoning.

Results The following attributed risks were observed: 12% (95% CI=8% to 16%) for both chemicals and medicines stored unsafe, 19% (15% to 23%) for child reported as hyperactive, 40% (38% to 42%) for storage of kerosene and petroleum in soft drink bottles, 48% (42% to 54%) for low socioeconomic status, 38% (32% to 42%) for no formal mothers education and 5.8% (2% to 10%) for history of previous poisoning. All 48% of cases for overall study population which could be attributed to at least one of the six risk factors. Among girls, this proportion was 23% and 43% among boys. About half of the unintentional childhood poisoning cases in this Pakistani population could be avoided.

Conclusion Exposure to potentially modifiable risk indicators explained about half of the cases of unintentional poisoning among children under 5 years of age in this Pakistani population, indicating the theoretical scope for prevention of the disease.