[ID-P#140] Demographic Profiles and its Relationship with Severity of Household Products Poisoning Cases Referred to the National Poison Centre of Malaysia from 2018 to 2023

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Background/Objectives: Poisoning remains a critical public health issue, with demographic factors potentially influencing the severity of outcomes. This study investigates the correlation between poisoning severity score (PSS) and demographic profiles of poisoning cases referred for enquires to National Poison Centre of Malaysia (NPCM) to better understand the impact of these factors on poisoning outcomes.

Methods: A six-year retrospective review (2018- 2023) of household product poisoning cases was conducted by analysing related demographic data of the cases (state, age category, gender and race) and correlating it with the initial severity of the cases upon reporting to NPCM. Chi-Square Test of Independence and Spearman's rank-order correlation test were used in the data analysis.

Results & Conclusions: During the 6-year study period, 5,300 poisoning cases involving household products were received. The highest demographic variables recorded were as following: 55.1% cases were male, 40.7% were children aged 1-4 years-old and 52.7% were Malay. Selangor referred 14.7% of the cases followed by Johor with 12.7% and Perak with 10.2%. The percentage of cases with initial PSS were: none 32.1%, minor 52.7%, moderate 13.2%, severe 1.8%, fatal 0.0%, and unknown 0.2%. The Chi- Square Test of Independence showed a statistically significant association between states in Malaysia ($p=.024$), gender ($p<.001$) and race ($p<.001$) with the initial severity. Spearman's correlation analysis revealed a moderate, positive, and statistically significant relationship between age category andinitial severity ($\rho = 0.354$, $p < 0.001$), indicating higher severity with increasing age. This finding underscores the importance of age-specific interventions and risk assessments in poisoning management. Further research is recommended to explore the underlying causes of these correlations and to develop strategies for effective poisoning prevention and management.