## **Poster Abstracts**

## **PO-16**

## FINDING OF THE SILVER BEADS

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**Objectives:** Mercury exposure is considered a rare occurrence to the general public in view of strict legislative control and accessibility. Such hazard has potential ramifications to the social and environmental aspects of the surrounding area, which also includes all first responders from varying backgrounds.

**Methods**: In May 2016, cases exposed to elemental mercury began presenting to Emergency Department, Hospital Bukit Mertajam over 7 days totaling 72 patients. The index cases were 3 male teenagers aged between 16-19 years, who accidentally discovered a mercury spillage in a palm oil plantation. The mercury was brought back home, then divided and distributed at various times among their families and friends. The substance was also brought to school where another 58 students & teachers. Eventually, teacher identified the substance and alerted the police, medical and hazardous materials (HAZMAT) teams.

**Results:** There were 44 patients out of 72 which were symptomatic, many of which presented with respiratory-related symptoms. Blood mercury levels, urine spot tests for mercury and 24-hour urine for mercury level were conducted. Only 1 patient came back positive for urine spot test for mercury (0.004 mg/litre), while the remaining tests were placed on hold due to facility limitations. All cases were treated symptomatically and none required chelation therapy.

**Conclusion:** This recent incident highlight that mercury exposure may be under reported due to illegal usage. This may just only be the tip of the iceberg. Hence, this incident has brought to light the necessity of continual preparedness of the current healthcare system in responding to a toxicological emergency. This will encompass medical emergency and decontamination drills, optimal equipment availability and a strategic organizational response in ensuring the safety and containment of healthcare personnel and exposed victims