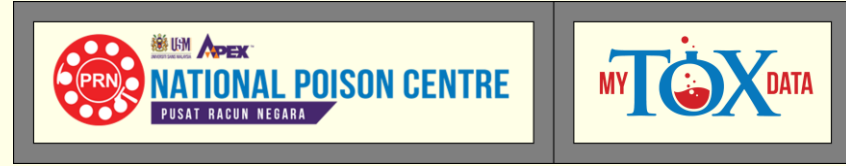


Toxicovigilance monitoring in Malaysia through hazard identification and risk characterization of toxic substances exposure via MyToxData; a poisoning epidemiology surveillance system by the National Poison Centre USM



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INTRODUCTION

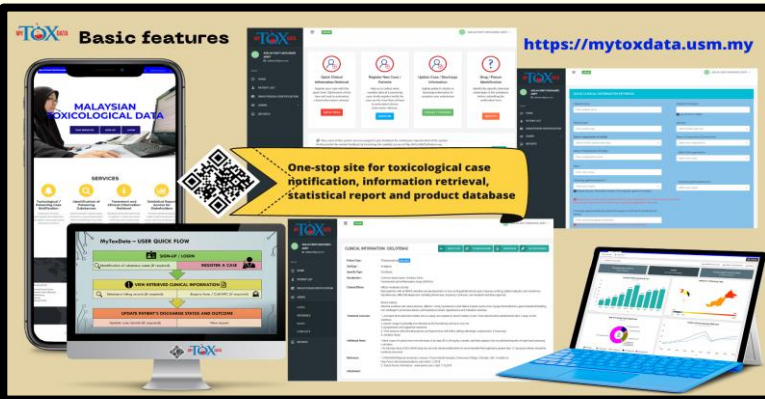
Poison centres are key players of toxicovigilance activities since poisoning statistics generated are essential to define the cause, incidence and severity of poisonings occurring in the general population. To date, published epidemiological studies of poisoning cases in Malaysia are minimal and related data are scattered and may not reflect the actual national poisoning burden.

OBJECTIVES

To identify the emergence of new substances as well as trending substances that are frequently implicated in human poisoning exposure cases in Malaysia derived from poison centre records in MyToxData System.

METHODS

Retrospective review of secondary data from 2019 to 2021 recorded in MyToxData system, collected by the National Poison Centre (NPC) based on call enquiries from healthcare professionals who consulted the NPC Drug and Poison Information Service.



MyToxData System Preview

CONCLUSION

With changes and evolving trends of poisoning, a relevant, centralised and comprehensive surveillance system is vital. MyToxData generates information on evolving trends and identifies toxicovigilance targets so that effective targeted preventive measures and policies can be undertaken to help reduce the national poisoning burden.

RESULTS

- ❖ A total of 9077 poisoning cases were consulted within the 3-years study period (2019-2021).
- ❖ The majority of poisoning exposure calls came from the West Coast states; Selangor (15.5%), Johor (12.0%) and Perak (11.4%).
- ❖ More than half of the exposure involving males (55%) as compared with females (43%), while 59% of cases were un-intentional incidents and 52% are adult patients.
- ❖ Exposure mostly occurred at home (96%) via oral ingestion (94%).
- ❖ The top three poisoning agents for each year exhibit the same pattern with pharmaceutical products being the highest followed by household products and pesticides.

❖ Emerging trend and rise of certain product exposures were also identified as in Figure 4.

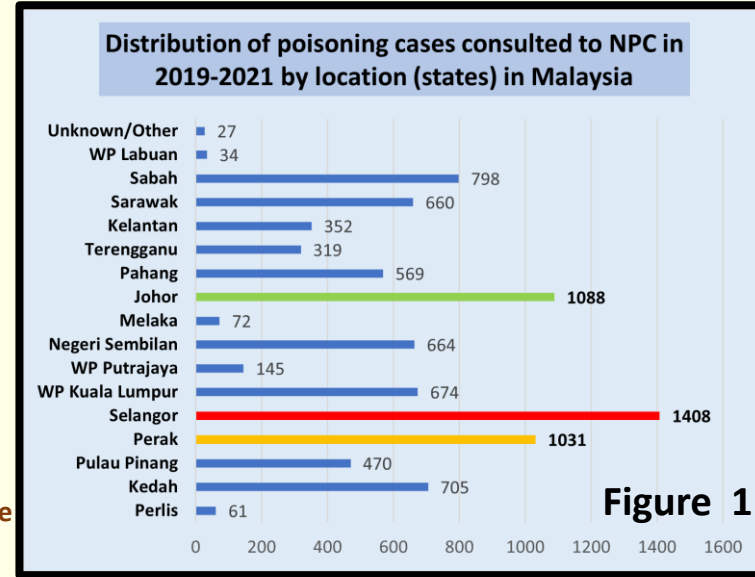


Figure 1

Demographic and incident profile	2019-2021	Race/Ethnic	2019-2021
Male	5002	Malay	4341
Female	3966	Chinese	1267
Adult (20-47 years old)	4765	Indian	1862
Other age categories	4242	Others, Unknown	1198
Intentional incident	3558	Non-Malaysian	409
Un-intentional incident	5427		

Figure 3 : Demographic and incident profile (number of cases)

Specific Product	2019	2020	2021
1. Slimming chocolate candy one brand)	0	3	15
2. Electronic cigarette/vape liquid	7	15	22
3. Hand sanitiser	11	54	66
4. Detergent pod/capsule	0	20	4

Figure 4 : Emerging trend of specific product exposures (number of cases)

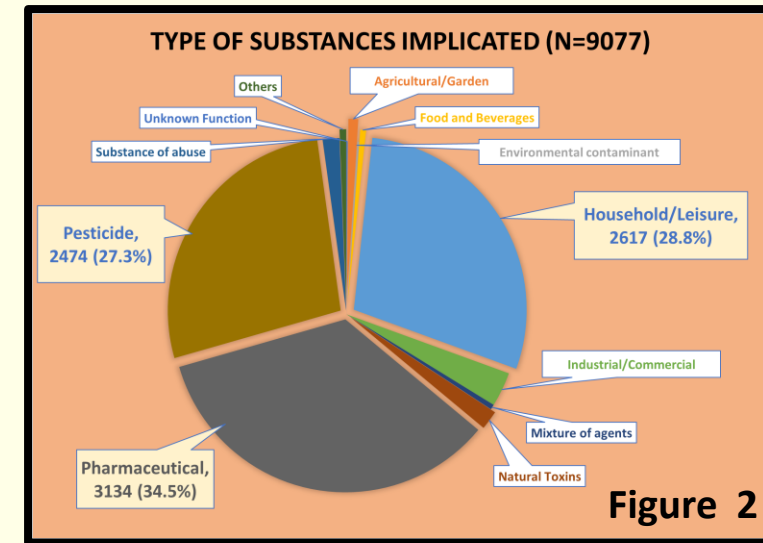


Figure 2