



TRANSFORMING TOXICOLOGY LANDSCAPE FOR SAFER AND SUSTAINABLE TOMORROW

POSTER PRESENTATIONS

[ID-P#086] Jellyfish Sting Related Mortalities in Malaysia (1990-2022)

Muhamad Na'Im Bin Ab Razak^a, Ahmad Khaldun Ismail^b, Praneetha Palasuberniam^c, Fairrul Kadir^c and Balu Alagar Venmathi Maran^d

^aHospital Lahad Datu; ^bUniversiti Kebangsaan Malaysia Medical Centre; ^cFaculty of Medicine and Health Sciences, Universiti Malaysia Sabah, Sabah; ^dInstitute of Integrated Science and Technology, Nagasaki University, Japan

Background: Globally, jellyfish stings result in approximately 150 million cases annually. In the Philippines, 20-50 deaths are attributed to chirodropid box jellyfish envenomation each year. However, the impact of jellyfish stings in Malaysia remains poorly documented. This study aims to review the frequency of jellyfish-related mortality in Malaysia from 1990 to 2022.

Method: Data from case reports, electronic newspaper archives, and cases managed by or consulted with the authors was collected and descriptively analysed for frequency, incident geolocation, demographic and causative species.

Results: From 1990 to 2022, 15 confirmed deaths due to jellyfish stings were analysed. The geolocations of these cases included Langkawi Island, Pangkor Island, Labuan Island and Sabah (Kota Belud, Semporna, Kota Kinabalu, Pulau Sapi, and Lahad Datu). Among the patients, there were seven males, four females, and four whose sex was unknown. In terms of age, there were eight pediatric patients, three adults, and four whose age was not recorded. The causative agents identified included three cases with undetermined species, two cases suspected to be caused by *Chiropsoides buitendijki*, six cases by Chirodropid box jellyfish, three cases by verified *Chironex yamaguchii*, and one case by *Chironex* sp.

Conclusion: The absence of a formal database for jellyfish sting-related mortality in Malaysia highlights the need for comprehensive data collection and analysis. Establishing an official record of confirmed jellyfish sting deaths is crucial to accurately assess the public health impact. This study underscores the significant, yet poorly documented, threat posed by jellyfish stings in Malaysia. Implementing effective monitoring and prevention strategies is imperative. Public health initiatives should focus on raising awareness, improving safety measures in coastal areas, and enhancing medical response capabilities to mitigate risks and reduce the incidence of jellyfish sting-related deaths.