

## Public understanding of rip current and beach safety at Teluk Cempedak Recreational Beach in Pahang, Malaysia

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### ABSTRACT

Rip currents are known to be a global public health issue and have been extensively contributed to the coastguard rescues and drowning cases at recreational beaches. Most studies in Malaysia have focused on the physical control of rip currents, with little emphasis on social factors. This study aims to assess the public knowledge of rip currents and beach safety at Teluk Cempedak Recreational Beach (TCRB) in Pahang, Malaysia. A convenience sampling technique was used to conduct a cross-sectional study among 300 beachgoers in TCRB. All data was collected using a self-administered questionnaire. Bivariable and multivariable logistic analyses were computed to identify factors associated with satisfactory knowledge of rip current and beach safety. More than half of the respondents were females (51%) and residents of Kuantan (62%). Out of 300 respondents, 160 (53.3%) had a satisfactory knowledge of rip currents, while a higher number of respondents (n = 221, 73.7%) had an unsatisfactory knowledge of beach safety. Those aged 35 and up, females, and those who had never had difficulty with water activities at the beach were more likely to have satisfactory knowledge of rip currents. The only factor found to be significantly related to satisfactory beach safety knowledge was age (35 years old). In conclusion, the respondents were concerned about rip currents, but they had inadequate knowledge of beach safety. Therefore, the development of effective beach safety education programmes is needed in Malaysia.

### KEYWORDS

Beach safety; Coastal hazards; Drowning; Public knowledge; Rip currents

**ACKNOWLEDGEMENTS**

This publication is supported in part by UMP-IIUM-UiTM Sustainable Research Collaboration Grant 2020 (SRCG20-052-0052). We thank Department of Marine Science, Kulliyah of Science and Institute of Oceanography and Maritime Studies (INOCEM) for their support and contributions to the study.