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Yusof, M.Z.^a, Ramli, M.Z.^b, Che Othman, S.F.^c, Mohd Aliziyad, Y.A.^d, Mohamed, J.^d, Pa'suya, M.F.^e, Abdul Ghafar, A.N.^f, A. Jabbar, W.^g

Public understanding of rip current and beach safety at Teluk Cempedak Recreational Beach in Pahang, Malaysia (2023) *Natural Hazards*, 115 (1), pp. 489-506.

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^a IIUM Health, Safety and Environment (IHSE) Kulliyah of Medicine, International Islamic University Malaysia, Pahang, Kuantan, 25200, Malaysia

^b Institute of Oceanography and Maritime Studies (INOCEM), Kampung Cherok Paloh, International Islamic University Malaysia, Pahang, Kuantan, 26060, Malaysia

^c Department of Biotechnology, Kulliyah of Science, International Islamic University Malaysia, Pahang, Kuantan, 25200, Malaysia

^d Department of Marine Science, Kulliyah of Science, International Islamic University Malaysia (IIUM), Pahang, Kuantan, 25200, Malaysia

^e Environment and Climate Change Research Group (ECCG), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Perlis, Arau, 02600, Malaysia

^f Faculty of Electrical and Electronics Engineering Technology, Universiti Malaysia Pahang, Pahang, Gambang, Malaysia

^g School of Engineering and the Built Environment, Birmingham City University, West Midlands, Birmingham, B4 7XG, United Kingdom

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. © 2022, The Author(s), under exclusive licence to Springer Nature B.V.

Author Keywords

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

Index Keywords

beach, coastal zone, hazard assessment, health and safety, logistics, multivariate analysis, public health, questionnaire survey, recreational activity, rip current, risk assessment, traditional knowledge; Malaysia, Pahang, West Malaysia

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Correspondence Address

Ramli M.Z.; Institute of Oceanography and Maritime Studies (INOCEM), Pahang, Malaysia; email: mzbr@iium.edu.my

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