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New Frontiers in Health: Expecting the Unexpected

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Risk Perceptions and Acceptance towards the Uptake of Pertussis Vaccine amongst the Healthcare Workers in Sabah and Sarawak

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ABSTRACT

Introduction: The incidence of pertussis has been said to increase over the years, and the affected patient-age group has also changed with the increasing number of cases amongst adolescents and adults. Therefore, adults require booster vaccination for protection against pertussis infection. Vaccination among healthcare workers (HCW) should be prioritized when a country implements an adult vaccine. However, the coverage of pertussis vaccination is still deficient among HCW due to low-risk perception. This study focused on finding the risk perception of pertussis infection amongst the HCWs based on the Protection Motivation Theory (PMT) and their acceptance to take pertussis vaccination. **Methods:** This was a cross-sectional study using online survey. The website link is given to the Healthcare workers consisting of doctors, Assistant Medical Officers, nurses, and Environmental Health Officers. **Results:** A total of 853 responders responded to the questionnaire. Most of the respondents (81.5%) are willing to receive the pertussis vaccine. Independent t-test showed that the PMT score was significantly different between those willing and those not willing to take the vaccine (p -value < 0.001, t statistics (df)= 7.729 (325)). Robust path analysis showed that sociodemographic factors (age, the institution of working and prior pertussis vaccination) (p =0.004), threat (p <0.001) and coping pathway (p <0.001) of PMT constructs were linked with the willingness to uptake vaccine. **Conclusion:** The willingness of the HCW to uptake the pertussis vaccine is associated with their risk perception towards pertussis.

Keywords: Healthcare workers, Pertussis vaccine