## **ABSTRACT 05**

## Assessing Road Crash Involvement and Predictors Among Malaysian Medical Professionals:

## An Islamic Medical Association of Malaysia (IMAM) Research Collaboration

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Objectives: Malaysian doctors often face long hours and inadequate rest, increasing their risk of road crash involvement (RCI). To address this, IMAM collaborated in a study with institutes of higher learning and non-governmental organizations to assess the prevalence and predictors of RCI among doctors. Methods: This study was part of a larger study approved by the Medical Research and Ethics Committee, Ministry of Health Malaysia (NMRR-18-3983-40609), and the Ethics Committee for Research Involving Human Subject, Universiti Putra Malaysia. It involved doctors who are fully or partially registered with the Malaysian Medical Council and their contacts. Data were collected through non-probability sampling using a self-administered online questionnaire between April 2020 and May 2021. Results: 6.7% and 37.9% of 375 medical doctors have reported being involved and nearly involved (due to tiredness, nodding off, and sleepiness) in RCI within the past 2 weeks, respectively. Not napping had higher odds of being in RCI due to nodding off (AOR; 2.193, 95% CI 1.157, 4.157) and sleepiness (AOR; 1.941, 95% CI: 1.030–3.657). Unmarried doctors were at higher risk of near-miss RCIs due to tiredness, nodding off, and sleepiness. Female doctors had lower odds of near-miss RCIs related to nodding off (AOR; 0.619, 95% CI: 0.394-0.972). Non-house officers also had reduced odds of near-miss RCIs due to tiredness (AOR; 0.562, 95% CI: 0.438-0.720), nodding off (AOR; 0.530, 95% CI: 0.396-0.711), and sleepiness (AOR; 0.603, 95% CI: 0.467–0.778). Avoiding overtime and chemical exposure also decreased the likelihood of nearmiss RCIs. Conclusion: Doctors who do not take naps are at a higher risk of RCIs, while unmarried doctors are more prone to near-miss incidents. In contrast, female doctors, non-house officers, and those who avoid overtime and chemical exposure experience a lower risk of near-miss RCIs.

## **Keywords:** Medical doctor, driving behaviour, commuting, workplace, crash involvement

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