

The association between mealtime and metabolic syndrome among primary health care workers: A cross-sectional study

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ABSTRACT

Introduction: Metabolic syndromes (MetS) are risk factors for cardiovascular diseases. Meal-related recommendations on how to prevent MetS were well-established, however, information about mealtime was lacking. This study aimed to explore the association between mealtime and MetS among primary health care workers (PHCWs) at Mahmoodiah Health Clinic (KPL). **Methods:** This is a cross-sectional, single-centre study involving PHCWs working at KPL. The eligible subjects were required to complete a questionnaire. Their annual medical checkup records were reviewed to determine the risk of MetS. **Results:** A total of 109 subjects aged 24-58 years were recruited in the study. 88 subjects (80.7%) were female. Most of them (78 subjects, 71.6%) were Malays, followed by Chinese (10.1%) and Indian (10.1%). 22 subjects (20.2%) were found to have MetS based on National Cholesterol Education Program Adult Treatment Panel III (NCEP ATP III) criteria. More than half of them (76 subjects, 69.7%) were reported as having early eating habits while the rest of them had late eating habits (having a meal, either dinner or supper, within two hours before bedtime at least three times a week). Although multiple studies had shown a significant association between mealtime and MetS, our study did not yield similar results even after adjusting for relevant confounders (odds ratio (95% confidence interval), 2.706 (0.652-11.237)). **Conclusion:** Our results found that late mealtime was not significantly associated with MetS. Further, well-designed studies are warranted to elucidate the impact of mealtime on metabolic outcomes.