

# **Prevalence of overweight and obesity in Malaysia, 2010 - 2016: a comprehensive meta-analysis**

## **ABSTRACT**

Prevalence of overweight and obesity in Malaysia has been reported in numerous studies, but with inconsistent findings, and no meta-analysis has been conducted to evaluate the findings of these studies. This meta-analysis investigated the prevalence of overweight and obesity in Malaysia based on independent observational studies from 2010 to 2016. Systematic literature search was performed in PubMed database based on inclusion and exclusion criteria. Heterogeneity for each subgroup analysis was determined using I<sup>2</sup> index and Q test. Funnel plot as well as Begg's and Egger's tests were employed to evaluate publication bias. Following a detailed assessment, 18 eligible studies involving 20,751 subjects were included in the meta-analysis. All pooled prevalence rates were determined using random effect model based on significance of heterogeneity observed (I<sup>2</sup>>80% and p<0.001). Overall, the prevalence rates of overweight and obesity in Malaysia was 25.0% and 13.1%, respectively. When stratified to gender, prevalence of overweight and obesity was higher in females than in males. No publication bias was identified.