

Abstract

A systematic review was performed up to December 2020 to identify randomized controlled trials (RCTs) involving any multi-component lifestyle medicine (LM) interventions consisting the follow elements: physical activity, advice on nutrition, sleep management, and/or stress management, on insomnia symptoms in comparison with wait-list control (WLC) and care as usual (CAU). Eight studies with 724 participants were included. Random effects models showed significant moderate effect of LM interventions on reducing insomnia symptoms at immediate posttreatment relative to WLC ($d = 0.67$; 95% CI: -1.29, -0.05) but non-significant effect relative to CAU. Owing to the small number of studies included in the meta-analysis, subgroup analysis and publication bias analysis were not carried out. Therefore, current findings should be interpreted with caution. Multi-component LM intervention appears to be efficacious in mitigating insomnia symptoms. Given the current results and study limitation, future studies on LM interventions in primary and comorbid insomnia in larger scale and higher quality are warranted.