

hypertension; however, a systematic evaluation of this relationship is lacking.

**Methods:** We conducted a systematic review and meta-analysis of observational studies that reported odds ratio, relative risk, hazard ratio, or standardized incidence ratio, comparing the risk of hypertension in persons with PLMS (defined by the level of periodic limb movements per hour of sleep depended on individual studies) versus those without PLMS. After assessing heterogeneity and bias, the pooled risk ratio and 95% confidence intervals (CIs) were determined using a random-effect, generic inverse variance method of DerSimonian and Laird.

**Results:** Out of 572 potentially relevant articles, six eligible cross-sectional studies were included in the data analysis which included 8,949 participants. The statistical heterogeneity of this study was insignificant, with an I<sup>2</sup> of 0%. A funnel plot showed no publication bias. The pooled risk ratio of hypertension in patients with PLMS was 1.26 (95% CI, 1.12–1.41).

**Conclusion:** Our analysis demonstrates an increased hypertension risk among patients with PLMS. Prospective or interventional studies are needed to confirm this association.

**Support (if any):**

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### PERIODIC LIMB MOVEMENTS DURING SLEEP AND HYPERTENSION: A SYSTEMATIC REVIEW AND META-ANALYSIS

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**Introduction:** Several studies suggest an association between periodic limb movements during sleep (PLMS) and