

Drug Information Office / Jordan University of Science and Technology

New study Linking Insomnia to Increased Stroke

Chronic insomnia is highly prevalent and affects approximately 30% of the general population. Insomnia impairs cognitive and physical functioning and is associated with a wide range of impaired daytime functions across a number of emotional, social, and physical domains.¹

A new study found that People plagued with insomnia might have an increased risk of stroke, particularly if they are young adults.^{2,3}

In this study researchers reviewed health records from the Taiwanese national population and compared stroke outcomes over a 4-year follow-up in 21,438 patients with a diagnosis of insomnia and 64,314 age- and sex-matched patients without insomnia.^{3,4}

Results showed that overall, insomniac patients had an 85% higher risk of developing stroke. This was reduced to 54% after adjustment for other factors. The effect seemed to be much greater in younger people, with patients with insomnia aged 18 to 34 years having an 8-fold higher risk for stroke than those of a similar age without insomnia.^{3,4}

Although stroke rates increased with age, as would be expected, the association between insomnia and stroke lessened with age.^{3,4}

The mechanism linking insomnia to stroke is not fully understood, but evidence shows that insomnia may alter cardiovascular health via systematic inflammation, impaired glucose tolerance, increased blood pressure, or sympathetic hyperactivity. Some behavioral factors (eg, physical activity, diet, alcohol use, and smoking) and psychological factors (eg, stress) might affect the observed relationship as researchers suggest.^{3,4}

In conclusion, insomnia predisposes individuals to increased risk of stroke and this association is profound among young adults. A novel behavioral intervention targeting insomnia that may prevent stroke should be explored. More prospective studies with representative populations and longer follow-up are needed to identify the long-term risks of developing stroke by insomnia subtypes. In addition, the pathophysiological pathways connecting insomnia and stroke need to be investigated.

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