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How much sleep do we need?



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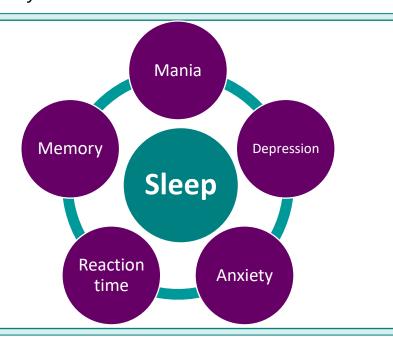
What?

Research using the UK biobank data of 498,277 participants has found that the amount of sleep for adults aged between 38–73 years¹ that is associated with the best subsequent mental health and cognition scores was 7 hours a day. It was also associated with the volumes of several important structures in the brain.

Why?

Changes in sleep duration have been linked to several diseases and psychiatric disorders, these include cardio-cerebral vascular disease and dementia.² An increase in mortality has been associated with sleep duration of less than 4–5 h per night.³ Prolonged sleep duration has been potentially linked with incident dementia.⁴

- One of the areas of the brain most affected by sleep was the hippocampus which is a structure that is important for the laying down of new memories.
- Insufficient and excessive sleep duration were associated with subsequent poorer mental health
- People who got more or less than seven hours of sleep showed the greatest negative changes
- The analysis found that people who slept seven hours a night performed best on average on cognitive tests for processing speed, visual attention, memory and problem-solving skills



Who?

Difficulty falling and staying asleep, decreased sleep efficiency and decreased quality and quantity of sleep are features of the aging process.⁵ Therefore, sleep disturbances are prevalent in the aging population and may be associated with poor wellbeing and cognitive decline.

Author Comments

The results of this study shows there is an association between sleep duration mental health and cognitive outcomes at a later date, but it may or may not be causal. There could be a confounding factor with sleep disturbance as the earliest symptom.

Ninety-four percent of participants were of European ancestry which limits the generalizability of the results to other ethnic groups.

Only sleep duration and not quality of their sleep was investigated.

References

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