

Introduction

- The prevalence of diabetes has been increasing rapidly in the Middle East, with 81 million individuals in the region being diabetic.
- Several studies have documented the impact of multiple lifestyle factors and glycemic control, including diet, physical activity, and sleeping pattern.
- Short of sleep duration was associated with poor glycemic control and higher glycated hemoglobin (HbA1c).

Objective

This case-control study examined whether there is an association between sleep duration, quality, and glycemic control among adults with diabetes.

Methodology

- The study is a case-control of 2,500 Qatari adults (men and women) and long-term residents (individuals living in the country for ≥ 15 years) aged 18–60 years old with a history of diabetes.
- Exclusion criteria: Pregnant women and people with terminal illnesses.
- Dependent variable: Glycemic control measured as HbA1c.
- Independent variable: Sleep duration and quality.
- Confounding variables: BMI, physical activity, smoking status, educational level, fruits and vegetables intake, insulin use, diabetes medications, and hypertension medications.
- All the analyses were conducted using STATA 16.

Results

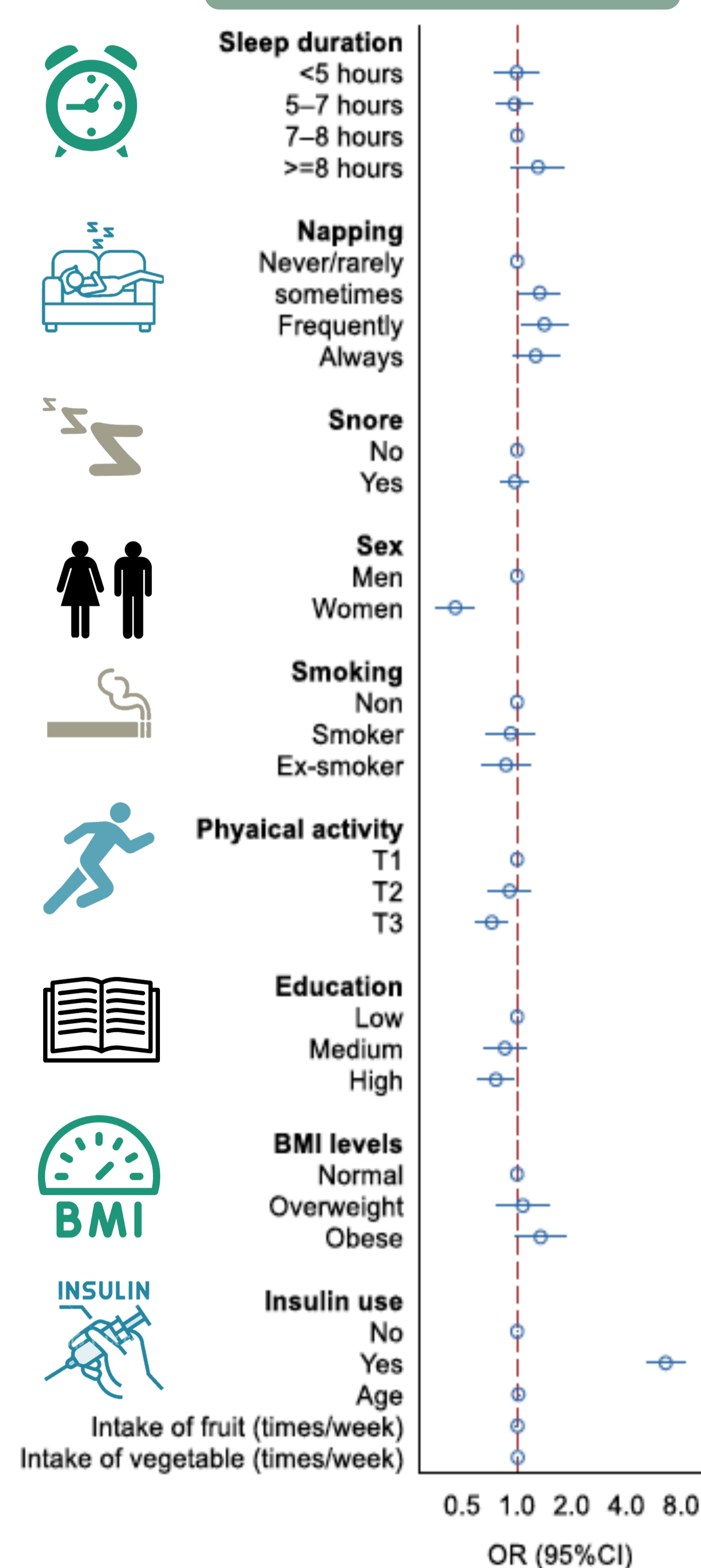


Figure 1: Association between sleep/other lifestyle factors and poor glycemic control

Conclusion

- Sleep health is an important modifiable risk factor for improving glycemic control in diabetes.
- Napping may be an independent risk factor for poorer glycemic control.
- Further research is needed to establish the causal link between sleep and impaired glucose metabolism.
- These findings may open new strategies for targeted intervention to improve the duration and quality of sleep.

Acknowledgment

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References

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