



Association of Sleep Quality With Academic Performance Among Undergraduate Dental Students

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Introductions

Sleep quality is an essential aspect of overall well-being and has a significant impact on various aspects of human functioning, including cognitive performance, memory consolidation, and attention span.¹ Dental students are often reported to unknowingly engage in unhealthy sleep habits, which, along with poor oral health habits, can influence their academic performance.^{27,28}

Objectives: This systematic review aimed to assess the association between sleep quality and academic performance among undergraduate dental students.

Methods

This systematic review followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines.²⁹ The protocol for this systematic review has been registered with the International Prospective Register of Systematic Reviews (PROSPERO registration number).

Focus question: “Is there an association between sleep quality and academic performance among undergraduate dental students?”

Inclusion criteria

Population (P): Undergraduate dental students

Intervention (I): Studies that examined sleep quality as an independent variable, assessed through self-report measures, or utilized validated sleep quality assessment tools or questionnaires.

Comparator (C): No specific comparator was included

Outcome (O): Academic performance of students such as grades, test scores, performance evaluations, or other objective measures.

Study Design (S): Observational studies (cross-sectional, cohort, case-control) that investigated the association between sleep quality and academic performance among undergraduate dental students or Intervention studies, including randomized controlled trials, that examined the effect of interventions aimed at improving sleep quality and its impact on academic performance.

Exclusion criteria

Review articles, editorials, commentaries, conference abstracts, and unpublished studies.

Results

Figure 1: PRISMA Flow Chart (Preferred Reporting Items for Systematic Reviews and Meta-Analyses)

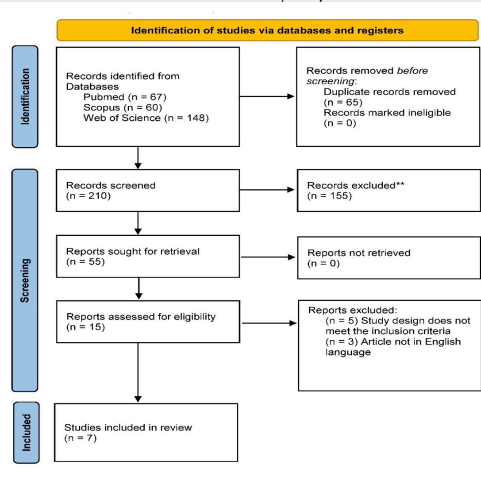
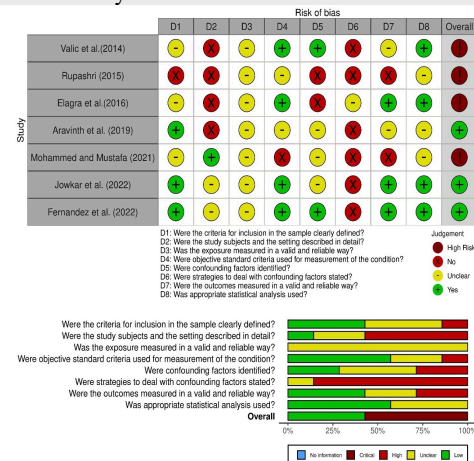


Figure 2: Summary of risk of bias assessments



Conclusions and Future Directions

This systematic review evaluated the association of sleep quality with academic performance in dental undergraduates. Within the limitations of the systematic review, there is a low level of evidence that poor sleep quality is consistently linked to lower academic performance in this population. The findings highlight the need for interventions and strategies aimed at promoting healthy sleep habits and improving academic outcomes in this population.

Future research should focus on conducting more robust studies with larger sample sizes, diverse student populations, and standardized methodologies for assessing sleep quality and academic performance. Further research with larger datasets is needed to confirm and replicate these findings.

References

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