

INPLASY PROTOCOL

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Conflicts of interest:
None declared.

Prevalence of subjective poor sleep quality in major depression disorder patients: a systematic review and meta-analysis

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Review question / Objective: To systematically examine prevalence of subjective poor sleep quality in major depression disorder patients.

Eligibility criteria: (P) Participants: patients with major depressive disorder according to internationally recognized diagnostic criteria (e.g., Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV), the 10th revision of the International statistical classification of diseases and related health problem (ICD-10)) (American Psychiatric Association, 1994; World Health Organization, 2004); (I) Intervention: not applicable; (C) Comparison: not applicable in epidemiological surveys and healthy controls in comparative studies; (O) Outcomes: prevalence of poor sleep quality or the available data that could generate prevalence of poor sleep quality participants as measured by the standard instruments such as the Pittsburgh Sleep Quality Index (PSQI) (Smyth, 1999); (S) Study design: epidemiological and comparative studies (for cohort studies, only the baseline data were extracted); Only studies published in English with assessable data were included. Studies involving MDD and comorbid severe psychiatric disorders, such as bipolar disorders and schizophrenia, were excluded.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 17 February 2023 and was last updated on 17 February 2023 (registration number INPLASY202320078).

INTRODUCTION

Review question / Objective: To systematically examine prevalence of subjective poor sleep quality in major depression disorder patients

Condition being studied: Preliminary evidence showed that poor sleep quality is common in psychiatric disorder patients and is associated with several negative health outcomes. Therefore, this systematic review will examine the

prevalence of poor sleep quality in patients suffering from major depressive disorder.

METHODS

Search strategy: (Depressive Disorder, Major [MeSH] OR Major depress* OR unipolar depress* OR depress*, major OR recurrent depressive disorder OR single episode depressive disorder OR severe depression) AND (Sleep Quality OR Qualities, Sleep OR Quality, Sleep OR Sleep Qualities OR quality of sleep OR sleeping quality OR Pittsburgh sleep quality index OR PSQI).

Participant or population: Patients with major depressive disorder.

Intervention: Not applicable.

Comparator: Not applicable in epidemiological surveys and healthy controls in comparative studies.

Study designs to be included: Epidemiological and comparative studies (for cohort studies, only the baseline data were extracted).

Eligibility criteria: (P) Participants: patients with major depressive disorder according to internationally recognized diagnostic criteria (e.g., Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV), the 10th revision of the International statistical classification of diseases and related health problem (ICD-10)) (American Psychiatric Association, 1994; World Health Organization, 2004); (I) Intervention: not applicable; (C) Comparison: not applicable in epidemiological surveys and healthy controls in comparative studies; (O) Outcomes: prevalence of poor sleep quality or the available data that could generate prevalence of poor sleep quality participants as measured by the standard instruments such as the Pittsburgh Sleep Quality Index (PSQI) (Smyth, 1999); (S) Study design: epidemiological and comparative studies (for cohort studies, only the baseline data were extracted); Only studies published in English with

assessable data were included. Studies involving MDD and comorbid severe psychiatric disorders, such as bipolar disorders and schizophrenia, were excluded.

Information sources: PubMed, Web of Science, EMBASE, PsycINFO.

Main outcome(s): Prevalence of subjective poor sleep quality.

Quality assessment / Risk of bias analysis: For epidemiological studies, study quality was assessed using an eight-item assessment instrument with a total score ranging from 0-8, while comparative studies were scored by Newcastle-Ottawa Scale (NOS).

Strategy of data synthesis: Both the prevalence, Odds Ratio (OR), and standard mean difference were pooled based on a random-effects model. I² Index was used to evaluate the studies heterogeneity, when the heterogeneity is larger than 50%. The subgroup analyses were conducted to explore the sources of heterogeneity for categorical variables.

Subgroup analysis: The PSQI cut-off values, diagnostic criteria of MDD, source of patients, study design, sampling method, income level based on the World Bank classification.

Sensitivity analysis: Sensitivity analyses will be performed to identify outlying studies by excluding studies one by one.

Language restriction: English.

Country(ies) involved: China.

Keywords: MDD, subjective sleep quality, prevalence, PSQI.

Contributions of each author:

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