INPLASY PROTOCOL

To cite: Chen et al. Prevalence of poor sleep quality in schizophrenia: a systematic review and meta-analysis. Inplasy protocol 202310021. doi:

10.37766/inplasy2023.1.0021

Received: 09 January 2023

Published: 10 January 2023

Corresponding author: Yu-Tao Xiang

xyutly@gmail.com

Author Affiliation:

Faculty of Health Sciences, University of Macau, Macao SAR, China.

Support: University of Macau.

Review Stage at time of this submission: The review has not yet started.

Conflicts of interest: None declared.

INTRODUCTION

Review question / Objective: Studies regarding the prevalence of poor sleep quality in schizophrenia have reported conflicting results, and the underlying factor require further study. In order to understand the association between schizophrenia on sleep quality, we conducted this meta-analysis to systematically investigate the prevalence of poor sleep quality in schizophrenia.

Condition being studied: 1) Schizophrenia. 2) Poor sleep quality. Preliminary evidence showed that poor sleep quality is common in psychiatric disorder patients and is associated with several negative health

Prevalence of poor sleep quality in schizophrenia: a systematic review and meta-analysis

Chen, MY¹; Xiang, YT²; Wang, YY³; Si, TL⁴; Liu, YF⁵.

Review question / Objective: Studies regarding the prevalence of poor sleep quality in schizophrenia have reported conflicting results, and the underlying factor require further study. In order to understand the association between schizophrenia on sleep quality, we conducted this metaanalysis to systematically investigate the prevalence of poor sleep quality in schizophrenia.

Condition being studied: 1) Schizophrenia. 2) Poor sleep quality. 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 schizophrenia.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 10 January 2023 and was last updated on 10 January 2023 (registration number INPLASY202310021).

outcomes. Therefore, this systematic review will examine the prevalence of poor sleep quality in patients suffering from schizophrenia.

METHODS

Participant or population: Patients with schizophrenia.

Intervention: NA.

Comparator: 1) In comparative studies: healthy control, 2) In one-arm epidemiological surveys: not applicable.

Study designs to be included: Crosssectional study, case-control study, or cohort study (only baseline data of cohort studies will be included).

Eligibility criteria: The inclusion criteria according to the PICOS acronym were as follows: participants (P): patients with schizophrenia diagnosed according to international or local diagnostic criteria such as the Diagnostic and Statistical Manual of Mental Disorders (DSM) (1996) and the International Statistical **Classification of Diseases and Related** Health Problems (ICD) (Davenport, WintersMiner et al. 2015); intervention (I): not applicable; comparison (C): healthy controls in case-control studies and cohort studies; and not applicable in crosssectional studies without controls; outcomes (O): the prevalence of poor sleep quality or data that could generate prevalence of poor sleep quality. Sleep quality was assessed using standard instruments; and study design (S): crosssectional study, case-control and cohort study (only the baseline data of cohort study were extracted).

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

Main outcome(s): Prevalence of poor sleep quality in patients with schizophrenia.

Quality assessment / Risk of bias analysis: 1) In comparative studies: Newcastle-Ottawa Scale.

2) In one-arm epidemiological surveys: A study quality assessment scale with 8 items with be used.

Strategy of data synthesis: The prevalence of poor sleep quality will be pooled using R program based on random-effects model. Heterogeneity between studies will be calculated. Publication bias was estimated with funnel plots and the Egger's test. The two-tailed significant level will be set at p<0.05.

Subgroup analysis: Subgroup analysis will be conducted based on categorical moderating variables with available data. Meta-regression analysis will be conducted based on continuous moderating variables with available data.

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

Language restriction: The language is limited in English or Chinese.

Country(ies) involved: China (Macao).

Keywords: Schizophrenia, Sleep quality, PSQI, Meta-analysis.

Contributions of each author:

Author 1 - Meng-Yi Chen. Email: yc27620@um.edu.mo Author 2 - Yu-Tao Xiang. Author 3 - Yue-Ying Wang. Email: mc25805@um.edu.mo Author 4 - Tong Leong Si. Email: mc24763@um.edu.mo Author 5 - Yu-Fei Liu. Email: mc24753@um.edu.mo