

INPLASY PROTOCOL

To cite: Li et al. Incidence and influencing factors of chronic fatigue syndrome in nurses: A protocol for meta-analysis and systematic review. Inplasy protocol 202110011. doi: 10.37766/inplasy2021.1.0011

Received: 4 January 2021

Published: 4 January 2021

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Support:
18SB0189; SKYY2018012.

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

Conflicts of interest:
None.

Incidence and influencing factors of chronic fatigue syndrome in nurses: A protocol for meta-analysis and systematic review

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Review question / Objective: P: nurses I/E:Diagnosis of chronic fatigue syndrome C: no O:Incidence and influencing factors of chronic fatigue syndrome S:Cross-sectional study.
Condition being studied: Chronic fatigue syndrome (CFS) was formally proposed by the Centers for Disease Control and Prevention (CDC) in 1988. The typical clinical manifestation is long-term fatigue, accompanied by lymph node swelling, joint pain, muscle soreness, low fever, sleep disorder, memory and attention loss, and can not be improved by rest. Studies have shown that the overall estimated prevalence rate of chronic fatigue syndrome is 0.89%, and women account for about 1.5 times; At present, there are many problems such as manpower shortage in nursing industry at home and abroad. In addition, in recent years, the requirements for nursing quality are getting higher and higher, and the working pressure is getting higher and higher. The intensive work and the tense relationship between nurses and patients make nurses have many sources of stress, which is easy to cause chronic fatigue syndrome. To understand the status and influencing factors of chronic fatigue syndrome among nurses, and to formulate corresponding intervention programs are of great significance to improve the mental health of nurses and ensure the nursing quality.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 4 January 2021 and was last updated on 4 January 2021 (registration number INPLASY202110011).

INTRODUCTION

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METHODS

Search strategy: A search strategy will be developed using a combination of medical subheadings (MeSH) words and key words related to nurse, Chronic fatigue syndrome, incidence rate, and Related factors. The MeSH words include “nurses” and “Fatigue Syndrome, Chronic”. Taking the strategy of retrieving PubMed database as an example, the search strategy is as follows: #1 Nurse OR Personnel, Nursing OR Nursing Personnel OR Registered Nurses OR Nurse, Registered OR Nurses, Registered OR Registered Nurse. #2 Myalgic Encephalomyelitis OR Encephalomyelitis, Myalgic OR Chronic Fatigue Syndrome OR Chronic Fatigue Syndromes OR Fatigue Syndromes, Chronic OR Chronic Fatigue-Fibromyalgia Syndrome OR Chronic Fatigue Fibromyalgia Syndrome OR Chronic Fatigue-Fibromyalgia Syndromes OR Fatigue-Fibromyalgia Syndrome, Chronic OR Fatigue-Fibromyalgia Syndromes, Chronic OR Postviral Fatigue Syndrome OR

Infectious Mononucleosis-Like Syndrome, Chronic OR Infectious Mononucleosis Like Syndrome, Chronic OR Royal Free Disease OR Chronic Fatigue and Immune Dysfunction Syndrome OR Chronic Fatigue Disorder OR Chronic Fatigue Disorders OR Fatigue Disorder, Chronic OR Fatigue Disorders, Chronic OR Systemic Exertion Intolerance Disease OR Fatigue Syndrome, Postviral OR Fatigue Syndromes, Postviral OR Postviral Fatigue Syndromes. #3 Incidence rate OR Incidence of a disease #4 Related factors OR Relevant factors OR Factor, Risk OR Risk Factor OR Health Correlates OR Correlates, Health OR Risk Scores #5 #1 AND #2 AND #3 AND #4.

Participant or population: Nurses.

Intervention: No.

Comparator: No.

Study designs to be included: Cross-sectional study.

Eligibility criteria: Papers were screened using the following inclusion criteria: (a) The research object is nurses, (b) prevalence study of chronic fatigue syndrome, (c) clinical study, (d) population-based study. The initial assessment was made by considering the inclusion criteria and reading the title and abstract. Articles that met the criteria were thoroughly read in full and screened according to the exclusion criteria. The exclusion criteria were as follows: (a) nonclinical-based studies, (b) studies on clinical features or symptoms of CFS, (c) randomized controlled studies, (d) studies focusing on biological aspects of CFS, (e) studies on psychological/psychiatric issues associated with CFS, (f) studies on treatment or therapeutic aspects (e.g., the use of supplements) of CFS.

Information sources: The following electronic databases will be searched from the inception through the present to find studies that live up to our standard: PubMed, EMBASE, Web of Science, Cochrane Library, CNKI, Wanfang, and VIP. First, the first batch of documents that

meet the standards are determined through the selection of titles and abstracts, then further screening is 2 reviewers selecting by reading the full text and recording the cause of excluded literature. If 1 standard research is not available online, we will send an email to the author to get the full text or the required data.

Main outcome(s): The literature provides the prevalence rate of chronic fatigue syndrome of nurses or the corresponding data that can calculate the prevalence rate; To report the influencing factors of chronic fatigue syndrome; Logistic regression analysis data were provided to study related factors, including 95%CI.

Quality assessment / Risk of bias analysis: Refer to American health research and The quality management department (AHRQ) scored by two researchers Don't cross-check the included documents after quality evaluation, if any The two sides discuss the differences or consult the third researcher to solve them. Mark There are 11 items in total, with a total score of 0 ~ 11, 0 ~ 3 = low quality, 4 ~ 7 = medium quality and 8 ~ 11 = high quality.

Strategy of data synthesis: Meta-analysis was carried out with Stata 15. 1 software. OR(95%CI) indicates the combined effective value of each research. $P < 0.05$ is the difference with statistical significance. I² test and Q are adopted Test evaluation included heterogeneity between studies, I² > 0.05, it is considered that each study has homogeneity, using solid Fixed effect model; I² > 50%, and p of q test < 0.05, then it is considered Because of the heterogeneity of each study, the random effect model is adopted.

Subgroup analysis: Subgroup analysis was carried out according to the gender, department, age, working years, education background, professional title and marital status of nurses.

Sensibility analysis: We conduct the sensitivity analysis by excluding literature successively. When the system review

contains >10 articles, the Egger test will be conducted to evaluate publication bias.

Country(ies) involved: China.

Keywords: nurses; chronic fatigue syndrome; incidence rate; influence factor.

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