

INPLASY PROTOCOL

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Prevalence and Risk Factors for ICU Acquired Weakness: A Protocol for a Systematic Review and Meta-Analysis

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

Conflicts of interest:
None.

Review question / Objective: In this systematic review and meta-analysis, we will include the studies satisfying the following criteria: (1) the population are the ICU-AW patients with no restriction on the gender and the age. (2) The diagnosis of ICU-AW is reliable and have high accuracy such as the Medical Research Council (MRC) scale or the electrophysiological studies. (3) the studies reported the prevalence and risk factors of the ICU-AW. (4) The study design is cross-section or cohort study.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 18 July 2020 and was last updated on 18 July 2020 (registration number INPLASY202070080).

INTRODUCTION

Review question / Objective: In this systematic review and meta-analysis, we will include the studies satisfying the following criteria: (1) the population are the ICU-AW patients with no restriction on the

gender and the age. (2) The diagnosis of ICU-AW is reliable and have high accuracy such as the Medical Research Council (MRC) scale or the electrophysiological studies. (3) the studies reported the prevalence and risk factors of the ICU-AW.

(4) The study design is cross-section or cohort study.

METHODS

Participant or population: The ICU-AW patients.

Intervention: The diagnosis of ICU-AW is reliable and have high accuracy.

Comparator: The studies reported the prevalence and risk factors of the ICU-AW.

Study designs to be included: Cross-section or cohort study.

Eligibility criteria: We will include the studies satisfying the following criteria: (1) the population are the ICU-AW patients with no restriction on the gender and the age. (2) The diagnosis of ICU-AW is reliable and have high accuracy such as the Medical Research Council (MRC) scale or the electrophysiological studies. (3) the studies reported the prevalence and risk factors of the ICU-AW. (4) The study design is cross-section or cohort study.

Information sources: We will search the PubMed, Embase, Web of Science and the cochrane library from the inception to the August 2020.

Main outcome(s): The studies reported the prevalence and risk factors of the ICU-AW.

Quality assessment / Risk of bias analysis: Two reviewers will independently assess the quality of included studies by using the Newcastle-Ottawa Scale (NOS) for nonrandomized studies.

Strategy of data synthesis: We will use the STATA 15.0 (Stata Corp LP, College Station, TX) to analysis. Odds ratios (ORs) will be used for quantitative analyses. We will make a forest plot to visually evaluate the ORs and corresponding 95% confidence intervals (CIs) of each risk factor, and use the chi-square test for hypothesis testing ($P < 0.05$, considered statistically significant). Sensitivity analysis will be also conducted to assess the impact of a single

study on a comprehensive estimate of each risk factor. The degree of heterogeneity will be assessed using the I² statistic. I² values of 25%, 50%, and 75% indicate low, moderate, and high heterogeneity, respectively.

Subgroup analysis: We will conduct subgroup analysis to reduce the random variations between the estimates of the primary study. The subgroup analysis will be based on the different quality of studies and the different age and gender of participants.

Sensibility analysis: We will conduct subgroup analysis to reduce the random variations between the estimates of the primary study. The subgroup analysis will be based on the different quality of studies and the different age and gender of participants.

Country(ies) involved: China.

Keywords: Intensive care unit-acquired weakness, risk factors.

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