

INPLASY PROTOCOL

The effect of diabetes on mortality of COVID-19: a systematic review and Meta-analysis

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Yang, Y¹; Zhong, W²; Tian, Y³; Xie, CG⁴.

Review question / Objective: Does diabetes affect the novel coronavirus pneumonia(COVID-19) mortality?

Condition being studied: Some reports about the analysis of death situation that are diagnosed with COVID-19.

Information sources: PubMed, EMBASE, the Cochrane Library, CNKI, Wanfang Data and VIP databases.

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Corresponding author:
ChunGuang Xie

outsidersh@126.com

Author Affiliation:
Affiliated Hospital of Chengdu
University of TCM

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INTRODUCTION

Review question / Objective: Does diabetes affect the novel coronavirus pneumonia(COVID-19) mortality?

Condition being studied: Some reports about the analysis of death situation that are diagnosed with COVID-19.

Rationale: The novel coronavirus pneumonia was prevalent in the world in 2019 and had a huge impact and many people lost their lives. The incidence rate of diabetes is very high and seriously damage the body especially for the aged.

METHODS

Search strategy: The computer searches PubMed, EMBASE, the Cochrane Library, CNKI, Wanfang Data and VIP databases, and collects studies related to diabetes and COVID-19 mortality. The retrieval time limit is from the establishment of the database to April 30, 2020. At the same time, the references included in the literature are traced.

Participant or population: People diagnosed with COVID-19.

Intervention: With diabetes.

Comparator: Without diabetes.

Study designs to be included: Observation study.

Eligibility criteria: Patients reported novel coronavirus pneumonia (COVID-19) died.

Information sources: PubMed, EMBASE, the Cochrane Library, CNKI, Wanfang Data and VIP databases.

Main outcome(s): Mortality.

Additional outcome(s): None.

Data management: Two researchers independently screened, extracted and crossed the literature Check. In case of any difference, it shall be settled through discussion or consultation with a third party. In the process of literature selection, the first step is to read the title. After excluding the obviously irrelevant literature, the second step is to read the abstract and the full text to determine whether to include it. If necessary, contact the original study author by email or telephone to obtain the uncertain but very important information for this study and organize the database with Excel.

Quality assessment / Risk of bias analysis: Two researchers independently evaluated

and included in the study with NOS scale And cross check the results.

Strategy of data synthesis: Data extraction includes: Basic information: first author, publication time, research location, sample size, sex ratio, age, research type; outcome indicators concerned; relevant elements of bias risk assessment.

Subgroup analysis: Subgroups according to race, course of diabetes, blood glucose value and age.

Sensibility analysis: Sensitivity analysis by eliminating each research one by one.

Language: No language restriction.

Country(ies) involved: Any country involved in literature screening.

Keywords: COVID-19, diabetes, mortality, systematic review and Meta-analysis.

Contributions of each author:

Author 1 - Drafted the manuscript.

Author 2 - Data select.

Author 3 - Data select.

Author 4 - Corresponding author.