

INPLASY PROTOCOL

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None declared.

A meta analysis of the prevalence rate of diabetic retinopathy

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Review question / Objective: P: diabetic retinopathy; I:—; C:—; O: prevalence rate; S:cross-sectional study. Objective:To analyze the epidemiological characteristics of diabetic retinopathy and to provide scientific basis for its prevention and control.

Condition being studied: Diabetic retinopathy is one of the common microvascular complications in patients with diabetes mellitus, which ultimately seriously affects the vision of patients. It is the leading cause of blindness among young and middle-aged workers worldwide. It is one of the main causes of binocular blindness in elderly patients in western countries. Because of the high incidence, wide range, complex pathogenesis, serious consequences and poor treatment effect of DM and its DR, many countries have actively carried out epidemiological research on the population of DM patients in order to understand the incidence, distribution and related risk factors of DR, and to provide scientific basis for the formulation of targeted public prevention and control measures.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 25 September 2022 and was last updated on 25 September 2022 (registration number INPLASY202290112).

INTRODUCTION

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western countries. Because of the high incidence, wide range, complex pathogenesis, serious consequences and poor treatment effect of DM and its DR, many countries have actively carried out epidemiological research on the population of DM patients in order to understand the incidence, distribution and related risk factors of DR, and to provide scientific basis for the formulation of targeted public prevention and control measures.

METHODS

Participant or population: Diabetic retinopathy.

Intervention: None.

Comparator: None.

Study designs to be included: Cross-sectional study.

Eligibility criteria: Inclusion criteria: (1) Epidemiological investigation of DR; (2) based on population sampling. Exclusion criteria: (1) studies on the prevalence of DR in patients with DM; (2) studies on special populations; (3) studies with no clear diagnostic criteria for DR; (4) studies with repeatedly published or identical data; (5) studies with incomplete data and unable to calculate the corresponding rate.

Information sources: Pubmed, Embase database, Cochrane Library, Web of Science, CNKI, VIP, WangFang database, CMB.

Main outcome(s): Prevalence rate.

Quality assessment / Risk of bias analysis: Evaluation based on the cross-sectional research evaluation system of the AHRQ.

Strategy of data synthesis: Combined calculation of Progressive rate by double Arcsine transform method.

Subgroup analysis: Different area; different gender.

Sensitivity analysis: Sensitivity analysis by one-by-one elimination method.

Language restriction: None.

Country(ies) involved: China (Qinghai University of Medical department).

Keywords: diabetic retinopathy; epidemiology; Meta-analysis.

Contributions of each author:

Author 1 - Bin Li.

Author 2 - Fei Wen.

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