INPLASY PROTOCOL

Corresponding author:
Ran Wei

m18369610533@163.com

Author Affiliation:
Beijing Hospital

Review Stage at time of this submission: Completed but not published.

Conflicts of interest: None declared.

Effect of Foetal Exposure to Famine on the Risk of Nonalcoholic Fatty Liver Disease in Adulthood: A systematic review and meta-analysis

Wei, R[1]; Wang, WH[2]; Pan, Q[3]; Guo, LX[4].

Review question / Objective: P: Broad population; I: Foetal Exposure to Famine; C:Non-famine exposure; O:Nonalcoholic Fatty Liver Disease; C:RCTs.

Condition being studied: The risk of metabolic disease in adulthood is not only attributed to an unhealthy lifestyle after birth but also to famine exposure during the foetal period. This systematic review and meta-analysis aimed to evaluate the effects of foetal exposure to famine as a risk factor for developing nonalcoholic fatty liver disease (NAFLD) in adulthood.

Information sources: PubMed, Embase, Cochrane Library, Web of Science, China National Knowledge Infrastructure (CNKI), and Wanfang databases.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 21 August 2022 and was last updated on 21 August 2022 (registration number INPLASY202280081).

INTRODUCTION

Review question / Objective: P: Broad population; I: Foetal Exposure to Famine; C:Non-famine exposure; O:Nonalcoholic Fatty Liver Disease; C:RCTs.

Condition being studied: The risk of metabolic disease in adulthood is not only attributed to an unhealthy lifestyle after birth but also to famine exposure during the foetal period. This systematic review and meta-analysis aimed to evaluate the effects of foetal exposure to famine as a risk factor for developing nonalcoholic fatty liver disease (NAFLD) in adulthood.

METHODS

Participant or population: Broad People.

Intervention: Foetal Exposure to Famine.

Comparator: Non-famine exposure.

Study designs to be included: Cohort study.

Eligibility criteria: 1) the subjects were clinically diagnosed with NAFLD, 2) the exposure factor was foetal exposure to famine, and 3) the OR with 95% CI was determined to assess the strength of association between foetal exposure to famine and the risk of NAFLD.

Information sources: PubMed, Embase, Cochrane Library, Web of Science, China National Knowledge Infrastructure (CNKI), and Wanfang databases.

Main outcome(s): The pooled OR with 95% CI was determined to assess the strength of the association between foetal exposure to famine and the risk of NAFLD.

Quality assessment / Risk of bias analysis: We evaluated quality assessment of included studies using risk of bias tool in Revman5.4.

Strategy of data synthesis: The meta-analysis was performed using Review Manager 5.4 (Cochrane Collaboration, Oxford, UK).

Subgroup analysis: We performed a subgroup analysis according to the severity of NAFLD in the included study populations.

Sensitivity analysis: We test by excluding documents one by one.

Country(ies) involved: China.

Keywords: famine; intrauterine nutrition; adult metabolism; nonalcoholic fatty liver disease; meta-analysis.

Contributions of each author:
Author 1 - Ran Wei.
Author 2 - Weihao Wang.
Author 3 - Qi Pan.
Author 4 - Lixin Guo.