

INPLASY PROTOCOL

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Conflicts of interest:
None declared.

INTRODUCTION

Review question / Objective: It has been unclear the difference of different academic schools of traditional Chinese medicine in the treatment of obesity. This meta-

Effect of different academic schools of traditional Chinese medicine in the treatment of obesity: A Systematic Review and Meta-Analysis

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Review question / Objective: It has been unclear the difference of different academic schools of traditional Chinese medicine in the treatment of obesity. This meta-analysis aimed to summarize the effect of different academic schools of traditional Chinese medicine on assess the impact of on fasting plasma glucose (FPG), glycated hemoglobin (HbA1c), fasting insulin, and lipid profile, from clinical trials.

Condition being studied: Obesity is global pandemics. Worldwide, the prevalence of obesity has nearly tripled since 1975. Obesity is a major risk factor for the development of T2DM, as the associated chronic, low-grade, sterile inflammation contributes to both insulin resistance and b-cell failure. In the United Kingdom (UK), of the 3.2 million people with diabetes, an estimated 80% to 85% are overweight or obese, in whom weight gain could be potentially detrimental.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 26 January 2022 and was last updated on 26 January 2022 (registration number INPLASY202210123).

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METHODS

Participant or population: Participants with standards of body mass index (BMI) ≥ 24 kg/m² will be included. Mean-while, the participants who are included have no limitation of age, sex, region, citizenship, and nationality. Cases related to serious diseases, pregnancy, and drug-induced obesity are excluded.

Intervention: Traditional Chinese medicine treatment is the main intervention measures, including traditional Chinese medicine, massage, acupuncture, moxibustion, etc.

Comparator: Multiple different academic schools of traditional Chinese medicine control interventions will be included: no treatment, placebo and other interventions (e.g., cupping therapy, drugs, and physical interventions, moxibustion). Patients in the control group were treated with sham acupuncture, placebo, or hypoglycemic drugs, etc.

Study designs to be included: In this study, we aimed to summarize and assess the effectiveness of different academic schools of traditional Chinese medicine in the treatment of obesity and provide more options for clinicians and patients. We will electronically search PubMed, Medline, Embase, Web of Science, the Cochrane Central Register of Controlled Trials, China National Knowledge Infrastructure, Chinese Biomedical Literature Database, Chinese Scientific Journal Database, and Wan-Fang Database from the date of creation to December 2023.

Eligibility criteria: Participants with standards of body mass index (BMI) ≥ 24 kg/m² will be included. Mean-while, the participants who are included have no limitation of age, sex, region, citizenship, and nationality. Cases related to serious diseases, pregnancy, and drug-induced obesity are excluded.

Information sources: We will electronically search PubMed, Medline, Embase, Web of Science, the Cochrane Central Register of Controlled Trials, China National Knowledge Infrastructure, Chinese Biomedical Literature Database, Chinese Scientific Journal Database, and Wan-Fang Database from the date of creation to December 2023. In addition, we will manually retrieve other resources including the reference lists of identified publications, conference articles, and gray literature. <https://www.ncbi.nlm.nih.gov/pubmed> <https://www.embase.com/> <http://apps.webofknowledge.com/> <http://isiknowledge.com/medline> <https://www.cochranelibrary.com/> <http://www.sinomed.ac.cn/> <https://www.cnki.net/> <http://g.wanfangdata.com.cn/index.html>.

Main outcome(s): (1)fasting plasma glucose (FPG), (2)glycated hemoglobin (HbA1c), (3)fasting insulin, (4) lipid profile.

Quality assessment / Risk of bias analysis: The literature quality of this study was evaluated by the bias risk table proposed by Cochrane collaborative network. The risk table includes 6 items: random sequence generation mode, whether to use allocation concealment, whether to blind the subjects and intervention providers, whether to blind the results evaluators, whether the results data are complete, whether to select the results report and other bias sources. The criteria used to assess the risk of bias are “low risk,” “high risk,” and “unclear.” In this process, 2 evaluators independently evaluate the methodological quality. In case of disagreement, the third author would be intervened.

Strategy of data synthesis: The terms for searching were: (‘Chinese herbal medicine

OR massage OR acupuncture OR body acupuncture OR abdominal acupuncture OR electropuncture') AND ('supple intervention') AND ('obese') AND (randomized OR blind OR placebo OR meta-analysis). We also attempted to contact the investigators if their clinical end-points were not reported.

Subgroup analysis: We will consider subgroups such as jurisdiction, clinic type, and location(rural/urban).

Sensitivity analysis: To test the robustness of the main decisions in the review process, we conducted a sensitivity analysis. The main analysis points included the impact of method quality, sample size, and missing data on the study. The meta-analysis will be reused, and more inferior-quality studies will be excluded. The results are compared and discussed based on the results.

Country(ies) involved: China.

Keywords: different academic schools of traditional Chinese medicine; treatment; obesity; Systematic Review; Meta-Analysis.

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