

INPLASY PROTOCOL

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Support: 313-3131045.

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

Conflicts of interest:

None declared.

INTRODUCTION

Review question / Objective: Is probiotic therapy as effective or more effective than existing treatments in relieving the severity of constipation and improving the patient's mental status and quality of life in elderly patients with constipation? Do probiotic treatments pose greater risks than existing treatments for older patients with constipation?

Probiotics in the treatment of senile constipation: A systematic review and meta-analysis

Xie, L¹; Cheng, CS².

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Condition being studied: Constipation is a common digestive disorder with a worldwide prevalence of 14-30%, and the prevalence increases with age. Constipation seriously impairs patients' quality of life, leads to significant medical costs, and places a burden on the healthcare system. For constipation, Western medicine uses lifestyle changes, medication, psychotherapy, biofeedback, and surgery to treat the condition.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 15 March 2022 and was last updated on 15 March 2022 (registration number INPLASY202230070).

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medication, psychotherapy, biofeedback, and surgery to treat the condition.

METHODS

Participant or population: The target population for this systematic review includes older patients (>65 years) with constipation of different ethnicities. We will include patients with functional constipation and constipation caused by other diseases.

Intervention: Probiotics or (and) prebiotic.

Comparator: Studies related to the effects of probiotics mixture on senile constipation, in which probiotic interventions were not mixed.

Study designs to be included: Randomised controlled trials of probiotics and elderly patients with constipation will be included.

Eligibility criteria: The target population for this systematic review includes older patients (>65 years) with constipation of different ethnicities. We will include patients with functional constipation and constipation caused by other diseases.

Information sources: From the earliest to March 2022, published RCTs will be retrieved by searching PubMed, Embase, Cochrane Library, Web of Science, Scopus, EBSCO, China National Knowledge Infrastructure (CNKI), VIP, Wan Fang database, China Biology Medicine Database (complete bowel movement). We will use the following search terms: randomized controlled trial, probiotics, prebiotic, Elderly, Senile, constipation.

Main outcome(s): The average number of spontaneous bowel movements (SBM) per week, number of adverse events. The improvement in stool consistency, satisfaction with treatment.

Additional outcome(s): This was followed by measures of constipation severity using the Cleveland Clinical Scoring System (CCS), Bristol Stool Form Scale (BSFS) or

Constipation Assessment Scale (CAS), psychological status using the Symptom Self-Rating Scale (SCL-90) and quality of life measures of constipation using the Quality of Life Questionnaire (PAC-QOL).

Quality assessment / Risk of bias analysis: The risk of bias in 6 areas (sequence generation, allocation hiding, blindness, incomplete data evaluation, selective results reporting, and other sources of bias) will be assessed with the Cochrane Deviation Risk Collaborative Tool. This tool will provide reasons to judge potential risks.

Strategy of data synthesis: The risk of bias in 6 areas (sequence generation, allocation hiding, blindness, incomplete data evaluation, selective results reporting, and other sources of bias) will be assessed with the Cochrane Deviation Risk Collaborative Tool. This tool will provide reasons to judge potential risks.

Subgroup analysis: We will conduct subgroup analyses based on type of constipation.

Sensitivity analysis: We will conduct a sensitivity analysis to verify the robustness of the research conclusions, assess the methodological quality, the study design, the effect of sample size and missing data, and the effect of the analysis method on the results of this review. The meta-analysis will be repeated, and lower-quality studies will be excluded. These results will then be compared and discussed.

Language: English.

Country(ies) involved: China.

Keywords: probiotics; Senile constipation.

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