# INPLASY PROTOCOL

To cite: Zhou et al.
Acupuncture with or without moxibustion for primary dysmenorrhea: a protocol for a systematic review and meta-analysis. Inplasy protocol 202080006. doi: 10.37766/inplasy2020.8.0006

Received: 04 August 2020

Published: 04 August 2020

Corresponding author: Xingchen Zhou

461224540@gg.com

#### **Author Affiliation:**

Jiangxi University of Traditional Chinese Medicine

**Support:** 1050Project: 5141900101.

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

## **Conflicts of interest:**

The authors declare no conflicts of interest.

#### INTRODUCTION

Review question / Objective: To evaluate the efficacy and safety of acupuncture therapy for primary dysmenorrhea.

Condition being studied: Primary dysmenorrhea (PD) refers to a woman's menstrual period in genital no organic

Acupuncture with or without moxibustion for primary dysmenorrhea: a protocol for a systematic review and meta-analysis

Zhou, XC<sup>1</sup>; Xiong, J<sup>2</sup>; Chi, ZH<sup>3</sup>.

Review question / Objective: To evaluate the efficacy and safety of acupuncture therapy for primary dysmenorrhea.

Condition being studied: Primary dysmenorrhea (PD) refers to a woman's menstrual period in genital no organic disease, abdominal pain, under the belly and other discomfort for the characteristics of disease of department of gynaecology, also called functional dysmenorrhea, main clinical manifestation is: under the menstrual abdomen spastic pain, radiation to the lumbar di ministry, vulva and anus and inner thighs, some patients accompanied by nausea, vomiting, dizziness, fatigue, symptoms such as edema, even collapse.

Information sources: We're going to use systematic electronic search, including PubMed, MEDLINE, Web of Science, Embase, Cochrane library, SinoMed, China National Knowledge Infrastructure (CNKI), WangFang Database(WF), and Chinese Scientific Journal Database (VIP).

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 04 August 2020 and was last updated on 04 August 2020 (registration number INPLASY202080006).

disease, abdominal pain, under the belly and other discomfort for the characteristics of disease of department of gynaecology, also called functional dysmenorrhea, main clinical manifestation is: under the menstrual abdomen spastic pain, radiation to the lumbar di ministry, vulva and anus and inner thighs, some patients accompanied by nausea, vomiting,

dizziness, fatigue, symptoms such as edema, even collapse.

#### **METHODS**

Search strategy: Terms: (take PubMed as an example) primary dysmenorrhea; acupuncture; acupuncture therapy; moxibustion; acupoint; randomly; randomized controlled trial; controlled clinical trial; randomized; trial; groups. We plan to search the following databases: 1) Embase; 2) Cochrane Library; 3) Pubmed; 4 ) Chinese databases Sino-Med(previously called the Chinese Biomedical Database); 5) Chinese National Knowledge Infrastructure; 6) VIP Database for Chinese Technical Periodicals; 7) Wanfang Data.

Participant or population: Patients with abdominal pain before or after menstruation or during menstruation, mainly concentrated in the lower abdomen, and with none of the other symptoms, including headache, dizziness, nausea and vomiting, diarrhea, waist and leg pain.

Intervention: We will include trials that apply acupuncture with or without moxibustion.

Comparator: Group of acupuncture will be compared with those without acupuncture treatment, sham acupuncture group, or conventional treatment.

Study designs to be included: Only randomized controlled trials(RCTs) will be included in this study.

Eligibility criteria: Published or unpublished randomized controlled trials without language restriction.

Information sources: We're going to use systematic electronic search, including PubMed, MEDLINE, Web of Science, Embase, Cochrane library, SinoMed, China National Knowledge Infrastructure (CNKI), WangFang Database(WF), and Chinese Scientific Journal Database (VIP).

Main outcome(s): The extent of pain in the lower abdomen measured by visual analog scale (VAS), and relief from symptoms.

Additional outcome(s): 1. Quality of life(QoL); 2. Adverse events.

Data management: (1)We will use NoteExpress and Excel software to extract data. The content will be saved in electronic form. (2) Different review authors will independently screen the titles and abstracts of records obtained by searching the electronic databases to determine potential eligibility. Full texts screening and data extraction will be conducted afterwards independently. Any disagreement regarding study selection will be resolved through discussion or arbitrated by the third author if necessary. In this step, we will use NoteExpress . (3) The research team designed structured data extraction tables, including: the first author, nationality, publication year, patients' basic information, sample size, intervention measures of test group, intervention measures of controlled group. qualitative evaluation method, target outcome (including primary outcome measures and secondary outcome measures), etc. Different review authors will independently extract data. Any disagreement regarding data extraction will be resolved through discussion or arbitrated by the third author if necessary. In this step, we will use Excel.

### Quality assessment / Risk of bias analysis:

Two of our researchers will use the bias risk tool provided by the Cochrane Collaboration to evaluate the quality of the literature using RevMan 5.4 software. This recommended tool includes 7 important items: sequence generation, allocation concealment, blinding of participants and personnel, blinding of results evaluation, incomplete result data, selective result reporting, and other biases. Make "Low risk," "High risk," and "unclear risk" judgments for each research literature. Finally, a "risk of deviation" summary and a chart are generated to show the results. As with the previous process, it will be independently assessed by 2 researchers.

If there is disagreement, it will be discussed with the 3rd researcher.

Strategy of data synthesis: This study will use RevMan5.4 software for data integration and analysis. The measurement data will use the mean difference (MD) as the effect indicator, and the count data will use the odds ratio (OR) as the effect index. Each effect indicator will be given as a point estimate with 95% confidence interval. The heterogeneity and size of each study result will be judged using statistical methods. For studies with no statistical heterogeneity, the analysis will be performed using a fixed-effect model, whereas a randomized effects model will be applied if for studies with significant statistical heterogeneity.

Subgroup analysis: A subgroup analysis will be conducted for the efficacy of acupuncture with or without moxibustion in patients with primary dysmenorrhea at different ages and treatment time.

Sensibility analysis: To assess the influence of each individual study, leave-one-out sensitivity analysis was performed iteratively by removing one study at a time to confirm that the findings were not influenced by any single study.

Language: No restriction.

Country(ies) involved: China.

Other relevant information: None.

Keywords: acupuncture, thunder-fire moxibustion, primary dysmenorrhea, network meta-analysis, randomized controlled trials.

Dissemination plans: We plan to publish a systematic review based on this protocol.

## Contributions of each author:

Author 1 - Xing-chen Zhou - conceive and design this protocol.

Author 2 - Jun Xiong - Revise this protocol; search strategy.

Author 3 - Zhen-hai Chi - Data collection; analysis of results.