

INPLASY PROTOCOL

To cite: Jiang et al. Effect of Tai Chi on psychological disorder in college students: a protocol of systematic review and meta-analysis. Inplasy protocol 202040140. doi: 10.37766/inplasy2020.4.0140

Received: 22 April 2020

Published: 22 April 2020

Corresponding author:
Wei Pan

weipan0121@outlook.com

Author Affiliation:
The Affiliated Hongqi Hospital
of Mudanjiang Medic

Support: YASPTFPA
(2018CGZH-15)

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

Conflicts of interest: None.

Effect of Tai Chi on psychological disorder in college students: a protocol of systematic review and meta-analysis

Jiang, LL¹; Meng, Y²; Zhang, Q³; Pan, W⁴.

Review question / Objective: Is Tai Chi (TC) effective on psychological disorder (PD) in college students (CS)?

Condition being studied: Psychological disorder; Tai Chi; college students.

Information sources: We will perform a comprehensive literature search of relevant RCTs in electronic databases from inception to the February 29, 2020 without restrictions of language and publication time: PubMed, EMBASE, Cochrane Library, Web of Science, Chinese Biomedical Literature Database, and China National Knowledge Infrastructure. A preliminary search strategy will be developed for PubMed. Similar search strategies will be adapted for other electronic databases. Besides, we will also examine Google Scholar, ongoing trials from clinical trial registries, and reference lists of included RCTs.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 22 April 2020 and was last updated on 22 April 2020 (registration number INPLASY202040140).

INTRODUCTION

Review question / Objective: Is Tai Chi (TC) effective on psychological disorder (PD) in college students (CS)?

Condition being studied: Psychological disorder; Tai Chi; college students.

METHODS

Participant or population: All CS who were diagnosed as PD will be included, regardless country, gender, and age.

Intervention: The participants in the treatment group all received TC. However,

we will exclude studies utilized TCM with other managements.

Comparator: There are no limitations related to the treatments on subjects in the control group. However, studies used the combination of TC and other treatments will not be included.

Study designs to be included: This proposed study will include randomized controlled trials (RCTs) alone that explore the effect of TC on PD in CS.

Eligibility criteria: This proposed study will include RCTs alone that explore the effect of TC on PD in CS. We will eliminate other studies, such as non-clinical trials, uncontrolled trials, and non-RCTs.

Information sources: We will perform a comprehensive literature search of relevant RCTs in electronic databases from inception to the February 29, 2020 without restrictions of language and publication time: PubMed, EMBASE, Cochrane Library, Web of Science, Chinese Biomedical Literature Database, and China National Knowledge Infrastructure. A preliminary search strategy will be developed for PubMed. Similar search strategies will be adapted for other electronic databases. Besides, we will also examine Google Scholar, ongoing trials from clinical trial registries, and reference lists of included RCTs.

Main outcome(s): Primary outcomes are depression and anxiety. Both depression and anxiety were measured by any related scales as reported in the primary trials. Secondary outcomes are stress (as assessed by Perceived Stress Scale or other related scales), panic (as evaluated by Panic Disorder Severity Scale or other associated scales), health-related quality of life (as appraised by 36-Item Short Form Survey or other connected surveys), and incidence of adverse events.

Data management: For all eligible studies, two investigators will independently perform data extraction using a predefined data extraction sheet. It consists of general

information (e.g. first author, journal, country, year of publication), clinical features (e.g. sample size, details of interventions, controls, outcomes, safety, and study findings), study methods (e.g. trial design, randomization, blind, allocation, concealment), and other information (e.g. conflict of interest, funding). Any discrepancies will be settled by a third investigator through consultation.

Quality assessment / Risk of bias analysis: For all included trials, two investigators will assess study quality separately through 7 aspects, and each one is further judged as low, unclear or high risk of bias. Any disagreements will be figured out by discussion with help of a third investigator.

Strategy of data synthesis: ReMan 5.3 software will be undertaken to perform statistical analysis. All continuous values will be estimated as weighted mean difference or standardized mean difference and 95% confidence intervals (CIs), and all dichotomous values will be demonstrated as risk ratio and 95% CIs. I^2 test will be identified to check statistical heterogeneity. $I^2 \leq 50\%$ suggests reasonable heterogeneity, and we will use a fixed-effects model. $I^2 > 50\%$ indicates remarkable heterogeneity, and we will utilize a random-effects model. A meta-analysis will be carried out based on the acceptable heterogeneity and ample data from sufficient trials. On the other hand, we will perform a subgroup analysis to examine heterogeneity sources.

Subgroup analysis: A subgroup analysis will be carried out according to the different types of treatments, comparators, and outcome measurements.

Sensibility analysis: A sensitivity analysis will be performed to test the robustness of study results by taking away low quality trials.

Country(ies) involved: China.

Keywords: Psychological disorder; Tai Chi; college students; effect.