INPLASY PROTOCOL

Corresponding author:
Yuming XU

xuyuming110@126.com

Author Affiliation:
Hangzhou Normal University

Support: None.

Review Stage at time of this submission: Data analysis.

Conflicts of interest:
None declared.

Effectiveness of Traditional Chinese Health-Promoting Exercise as an Adjunct Therapy for Drug Use Disorders: A Systematic Review and Meta-Analysis

Jia, DM[1]; Xu,YM[2].

Review question / Objective: The primary aim of this review is (1)to summarize and synthesize the empirical evidence available from clinical trials on the effectiveness of traditional Chinese health-promoting exercises on individuals' physical and psychological health among illicit drug user.(2) to explore the heterogeneity between included studies related to sample and study characteristics.

Condition being studied: Drug addicts are in poor physical and psychological condition, with high relapse rate. With regular practice of traditional Chinese health-promoting exercise, practitioners may maintain both physical and psychological health.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 17 May 2021 and was last updated on 17 May 2021 (registration number INPLASY202150066).

INTRODUCTION

Review question / Objective: The primary aim of this review is (1)to summarize and synthesize the empirical evidence available from clinical trials on the effectiveness of traditional Chinese health-promoting exercises on individuals' physical and

psychological health among illicit drug user.(2) to explore the heterogeneity between included studies related to sample and study characteristics.

Condition being studied: Drug addicts are in poor physical and psychological condition, with high relapse rate. With

regular practice of traditional Chinese health-promoting exercise, practitioners may maintain both physical and psychological health.

METHODS

Participant or population: Inclusion criteria: (1)Adult drug addicts (>18 years old) who were diagnosed as illicit drug abusers/ dependence based on DSM or ICD. (2)Adults who completed physiological detoxification and entered the rehabilitation stage. Exclusion criteria: (1)Substance abuse on alcohol , nicotine or other drugs.(2)Studies on drug addicts with severe or specific conditions (e.g., cancer, asthma).

Intervention: Traditional Chinese health-promoting exercise, including Tai Chi, Qigong, Five-Animal Exercise, Yi Jin Jing, Ba Duan Jin, Liu Zi Jue, etc. Studies investigating the effect of traditional Chinese health-promoting exercise plus another intervention were excluded.

Comparator: Treatment as usual or other types of intervention (e.g., routine calisthenics).

Study designs to be included: Studies had to be either randomized controlled trials (RCTs) or non-randomized comparison studies (NRS) published in peer-reviewed journals.

Eligibility criteria: Adult drug addicts (>18 years old) who were diagnosed as illicit drug abusers/dependence based on DSM3/4/5 or ICD-10/11.

Information sources: Systematic searches has been executed in the following databases at the May 1, 2021, including the Web of Science, PubMed, Cochrane Library, MEDLINE, Embase, WanFang, Data, VIP, CBM. Publications from all languages will be included. Searches will be rerun just before submitting the review for publication. Reference lists of all identified papers and relevant systematic reviews will be searched. If number of cases or other required data are not reported in the publications, we will contact authors to gain additional information.

Main outcome(s): (1)Physical health outcomes including systolic and diastolic pressures, resting heart rate, and balance. (2)psychological outcomes with particular emphasis on anxiety and depression using validated instruments (e.g., Symptom Checklist 90, SAS, SDS).

Quality assessment / Risk of bias analysis: The methodological quality of each study was independently evaluated according to the Cochrane Collaboration's for Assessing Risk of Bias from the Cochrane Handbook for Systematic Review Interventions.The type of bias is classified as the following domains: 1) selection bias (sequence generation and allocation concealment); 2) performance bias (blinding of participants and personnel); 3) detection bias (blinding of outcome assessment); 4) attrition bias (incomplete outcome data); 5) reporting bias (selective outcome reporting), and other biases. Judgment of the reviewers on each of seven domains of each included study was based on three categories (low risk of bias, high risk of bias, or unclear risk of bias).

Strategy of data synthesis: Revman 5.3 software was used to synthesize a subset of the most commonly reported outcomes with random effects models.The standard mean difference (SMD), along with 95% confidence interval (CI) using more conservative random effects model, was used to calculate heterogeneity for the continuous outcomes. Stata 16.0 (MP) software was used to analyze sensitivity and sources of literature heterogeneity. Studies with I2 ranging between 25% and 50% for low heterogeneity, I2 ranging between 50% and 75% for moderate heterogeneity, and I2 > 75% for high heterogeneity were considered respectively.Funnel plot was used to explore publication bias.The value of I2 was used to test heterogeneity across the included studies.

Subgroup analysis: We conducted a subgroup analysis by gender and type of drug.

Sensitivity analysis: We use STATA software for sensitivity analysis and the effect was merged and analyzed by eliminating individual studies one by one.

Country(ies) involved: CHINA, USA.

Keywords: Traditional Chinese Health-Promoting Exercise; Qi Gong; Health; Physiological health; Mental health; Meta-analysis.

Contributions of each author:
Author 1 - Dongming JIA.
Email: jiadm1@126.com
Author 2 - Yuming XU.
Email: xuyuming110@126.com