INPLASY PROTOCOL

Corresponding author:
Wu Zenan

460004087@qq.com

Author Affiliation:
Jiangxi University ofTraditional Chinese Medicine.

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

Conflicts of interest:
None declared.

The Baduanjin Mind-Body training improve the pulmonary functiont of patients with idiopathic pulmonary fibrosis(IPF): a protocol for systematic review and meta-analysis

Wu, Z[1]; Liu, L[2]; Ke, S[3]; Zhu, W[4].

Review question / Objective: To compare the effectiveness of the baduanjin Mind-Body training including standing, sitting, lying down and other interventions (e.g. conventional drugs, etc.) for idiopathic pulmonary fibrosis(IPF).
Participant or population: Patients with IPF will be included, and we will screen them for gender, age, race, region, etc.
Condition being studied: We're going to use systematic electronic search, including PubMed, MEDLINE, Cochrane library, SinoMed, China National Knowledge Infrastructure (CNKI), Wang Fang 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 22 September 2021 and was last updated on 22 September 2021 (registration number INPLASY202190071).

INTRODUCTION

Review question / Objective: To compare the effectiveness of the baduanjin Mind-Body training including standing, sitting, lying down and other interventions (e.g. conventional drugs, etc.) for idiopathic pulmonary fibrosis(IPF).

Condition being studied: The IPF is a worldwide respiratory disorder, which adversely affects patients' quality of life and work ability . There is no specific drug, and its clinical manifestations are cough, sexual breathing difficulties, eventually respiratory failure, and its clinical mortality rate is as high as per cent. It occurs primarily in older adults, is limited to the

lungs, and is defined by the histopathologic and/or radiologic pattern of UIP. It should be considered in all adult patients with unexplained chronic exertional dyspnea, cough, bibasilar inspiratory crackles, and/or digital clubbing that occur without constitutional or other symptoms that suggest a multisystem disease. The incidence of IPF increases with older age, with presentation typically consisting of insidious onset of dyspnea in the sixth and seventh decades Currently, monotherapy with Pirfenidone or Nintedanib is the mainstay of pharmacological treatment for IPF.Innovative therapies along with combinations of pharmacological agents hold great promise for the future. Baduanjin, which is widely used in almost all Chinese dynasties, is a mind-body health Qigong exercise originally developed in China. it combines physical exercise with psychological features for maximizing both physical and mental well beings, Nowadays, the indications for baduanjin exercise are gradually expanded because of its function and practicality, It emphasizes not only the interaction between body posture and movement, but also the harmony between meditation and breathing techniques. so that it can effectively exercise the body and concentrate the mind.

METHODS

Participant or population: Patients with IPF will be included, and we will screen them for gender, age, race, region, etc.

Intervention: The baduanjin Mind-Body training including standing, sitting and lying down.

Comparator: Control group: including, medication, placebo or other treatment.

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

Eligibility criteria: Only randomized controlled trials will be included in this study.

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

Main outcome(s): 1. 6-minute walk distance (6MWD), 2. peak oxygen consumption(peak VO2), 3. peak work rate (peak WR) and endurance time for constant work rate cycling.

Additional outcome(s): 1. Baseline Dyspnea Index (BDI), 2. visual analog scale that assessed dyspnea (VAS) 3. HRQL evaluated using St. George's Respiratory Questionnaire (SGRQ).

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 5.3 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: The RevMan 5.3.3 software was used for Meta analysis of the research objects.The relative risk (RR) and 95%CI were used for the counting data, and the mean difference (MD) and 95%CI were used for the measurement data.The heterogeneity among the included results was tested by 2 test.If the results of each study showed statistical homogeneity (P > 0.1, I2 < 50%), the fixed effect model was used for meta-analysis of the results.If there is statistical heterogeneity in the results of each study (P < 0.1, I2 > 50%), the source of the heterogeneity should be

analyzed; if there is statistical heterogeneity in the results of two studies and the difference in the results is not statistically significant, the random effect model should be used for meta-analysis. When there is too much heterogeneity among the results, statistical methods such as subgroup analysis, sensitivity analysis and descriptive analysis can be used to deal with it.

Subgroup analysis: We will conduct a subgroup analysis based on the integrity of the evidence collected, and try to trace the source of heterogeneity based on the age of participants, stage of onset, differences in intervention measures, controls and outcome measures.

Sensitivity 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.

Country(ies) involved: China.

Keywords: The Baduanjin Mind-Body training; idiopathic pulmonary fibrosis; pulmonary functiont protocol, systematic review; meta-analysis

Contributions of each author:
Author 1 - Wu Zenan - conceive and design this protocol.
Email: 460004087@qq.com
Author 2 - Liu Liangji - Revise this protocol; search strategy.
Email: llj6505@163.com
Author 3 - Ke Siwen - Data collection; analysis of results.
Email: ksw14556@sina.com
Author 4 - Zhu Wei - Analysis of results.
Email: zhuwei9201@163.com