

# INPLASY PROTOCOL

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None declared.

## Effectiveness of traditional Chinese medicine music therapy on anxiety and depression emotions of lung cancer patients: A protocol for systematic review and meta-analysis

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**Review question / Objective:** This study aims to systematically review the efficacy of traditional Chinese medicine five-element music therapy on anxiety and depression emotions of lung cancer patients.

**Condition being studied:** Lung cancer is the most commonly diagnosed cancer and is the leading cause of cancer deaths worldwide, most patients are already in the advanced stage when they are first diagnosed, due to the poor treatment effects and prognosis, patients often suffer from severe negative emotions such as depression and anxiety, those could affect the treatment and recovery of the illness, decrease the quality of life. Recently, music therapy is popular used for psychological problems of cancer patients for its positive efficacy and high safety. Especially, traditional Chinese medicine five-element music therapy (TCM-FEMT) as the traditional music therapy of China, through balancing Yin and Yang, regulating the circulation of chi and blood in the human body, which help for both physically and psychologically, There are studies found that TCM-FEMT could ameliorate the depression and anxiety of lung cancer patients, and ultimately improve the quality of life. But there is a lack of related systematic review to quantitatively evaluate its efficacy. Therefore, this study will to systematically review the efficacy of TCM-FEMT on negative emotions of lung cancer patients.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 05 February 2021 and was last updated on 05 February 2021 (registration number INPLASY202120021).

### INTRODUCTION

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## METHODS

**Search strategy:** The search is carried out by a combination of subject words and free words. Such terms as “Music OR Music therapy OR Five elements music OR Five-element music OR Five-tone therapy”, “Lung Neoplasms OR Lung Cancer OR Pulmonary Cancer OR Non-Small Cell Lung Cancer OR Small Cell Lung Cancer”, “Depression OR Anxiety OR Depressions OR Depressive Symptom OR Emotional Depression”.

**Participant or population:** Lung cancer patients with negative emotions of anxiety and depression. Regardless the nationality, race, body mass, and course of illness.

**Intervention:** Five-element music therapy.

**Comparator:** The control group included usual care, or other different intervention groups.

**Study designs to be included:** Randomized controlled trial (RCTs).

**Eligibility criteria:** Inclusion criteria included: (1) Participant or population: Lung cancer patients with negative emotions of anxiety and depression. Regardless the nationality, race, body mass, and course of illness; (2) Study designs to be included: randomized controlled trial; (3) Intervention: five-elements music therapy; (4) Comparator: The control group included usual care, or other different intervention groups. Exclusion criteria: (1) Articles unrelated to the purpose of the study; (2) Studies repeated publication; (3) Full-text articles that cannot be retrieved through online databases, libraries, or research authors; (4) The data is incomplete or have obvious errors.

**Information sources:** PubMed, the Cochrane Library, Web of Science, Embase and Chinese Biomedical Literature Database (CBM), China National Knowledge Infrastructure (CNKI), VIP Database, WanFang Database were electronically searched to collect RCTs on the efficacy of five-element music therapy on anxiety and depression emotions of lung cancer patients from inception to February 2021. In addition, retrospect the references of the included literature to supplement the relevant literature.

**Main outcome(s):** The primary outcomes assessed will be the Self-Rating Anxiety Scale (SAS), Self-Rating Depression Scale (SDS).

**Additional outcome(s):** Secondary outcome measures include the Pittsburgh sleep quality index (PSQI) and The Short Form-36 Health Survey (SF-36).

**Quality assessment / Risk of bias analysis:** RCT's risk of bias evaluation tool in Cochrane System Review Manual 5.1.0 will be used to evaluate the risk of bias for the included RCTs, Two researchers will

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independently evaluate the literature quality and cross-check the results.

**Strategy of data synthesis:** RevMan 5.3 software will be used for statistical analysis. The measurement data uses mean difference (MD) as the effect analysis statistic, and each effect size provides its 95% confidence interval (CI). The heterogeneity among the included results will be analyzed using  $\chi^2$  test, and the heterogeneity will quantitatively determined by combining with  $I^2$ . When there is significant statistical heterogeneity among the studies ( $P < 0.1$ ,  $I^2 > 50\%$ ), the combined effect size of the random effect model was adopted, Otherwise, the fixed effect model be adopted.

**Subgroup analysis:** If there is heterogeneity, we will conduct a subgroup analysis, we will take an analysis of subgroup according to characteristic of participants, such as gender, age, course of disease.

**Sensitivity analysis:** To assess the stability of meta-analysis results, sensitivity analysis will be performed by deleting the included studies one by one to assess the change in the overall effect after removing a certain study.

**Language:** English.

**Country(ies) involved:** China.

**Keywords:** Five-element music therapy; Lung cancer; anxiety; depression; Meta-analysis.

**Contributions of each author:**

Author 1 - Xiaolin Jiang - Contributed to search databases, literature retrieval, risk assessment of bias and draft the manuscript.

Author 2 - Jing Gao - Contributed to search related studies and analysis statistics.

Author 3 - Yuping Zheng - Contributed to literature retrieval and risk assessment of bias.