

# INPLASY PROTOCOL

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None.

## The effectiveness of Interpersonal psychotherapy in reducing suicidality: a protocol for meta-analysis

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**Review question / Objective:** How about the effectiveness of Interpersonal Psychotherapy(IPT) in reducing suicidality compared with control or other treatments.

**Condition being studied:** Suicide is a serious public health problem. In 2017, the suicide mortality rate of Chinese men was 10.7 per million, and that of Chinese women was 7.5 per million. The main domains of suicide research are as follows: suicidal ideation, suicidal attempt, and others. Researchers have found a variety of risk factors, such as depression, hopelessness, and interpersonal relationship problems(such as Perceived Burdensomeness and Thwarted Belongness) have merged as an important risk factor.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 22 May 2020 and was last updated on 22 May 2020 (registration number INPLASY202050082).

### INTRODUCTION

**Review question / Objective:** How about the effectiveness of Interpersonal Psychotherapy(IPT) in reducing suicidality compared with control or other treatments.

**Rationale:** Suicidal behavior is any form of deliberate or intentional self-injurious or

self-poisoning behaviour with known suicidal intent. One of the most important risk factors of suicidal behavior is interpersonal problems. Because interpersonal psychotherapy has been proved effective in improving the relationship and social skills, we suppose that it is also effective in reducing people's suicidal ideation, the occurrence of suicidal

attempt, and other suicide-related behaviors.

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## METHODS

**Search strategy:** We searched the following databases: the Cochrane Central Register of Controlled Trials (CENTRAL; to 20 May 2020); EBSCO/PsycINFO (to 20 May 2020), Ovid/MEDLINE (to 20 May 2020), Embase (to 20 May 2020), PubMed (to 20 May 2020). Chinese database: China National Knowledge Infrastructure (CNKI; to 20 May 2020), Chongqing weipu information network (VIP; to 20 May 2020), Wangfang Data (to 20 May 2020). Methodology restrictions: only "Randomized Controlled Trial", "controlled clinical trial", "clinical trial", "follow-up study", "treatment outcome" will be included. Language restrictions: English and Chinese. Terms: "interpersonal psychotherapy" or "interpersonal psychotherapy" or "interpersonal therapy" or "interpersonal therapy" or "IPT"; suicid\*.

**Participant or population:** Inclusion: participants with the suicide-related behaviors, or mood disorders, or other disorders. Exclusion: participants with communication deficits.

**Intervention:** Interpersonal psychotherapy (IPT) is a common therapy that focuses to improve individual's relationship by training adequate emotional responses to life stressors, disputes, and role transitions. The adaptive version of IPT based on the same principle will also be included.

**Comparator:** All comparators are accepted as long as they are not a type of Interpersonal Psychotherapy.

**Study designs to be included:** RCTs and CCTs will be included.

**Eligibility criteria:** Studies should be RCTs or CCTs of IPT that included suicide-related outcomes.

**Information sources:** We searched the following databases: the Cochrane Central Register of Controlled Trials (CENTRAL; to 20 May 2020); EBSCO/PsycINFO (to 20 May 2020), Ovid/MEDLINE (to 20 May 2020), Embase (to 20 May 2020), PubMed (to 20 May 2020). Chinese database: China National Knowledge Infrastructure (CNKI; to 20 May 2020), Chongqing weipu information network (VIP; to 20 May 2020), Wangfang Data (to 20 May 2020). The reference lists of all included trials and relevant systematic reviews will be checked to identify additional trials.

**Main outcome(s):** Suicidal ideation: "thoughts of engaging in suicide-related behavior (Various degrees of frequency, intensity, and duration)". Suicidal attempt: "A non-fatal self-inflicted potentially injurious behavior with any intent to die as a result of behavior". The measurements could be self-report scales or interviews. Whether or not an outcome would be judged to be suicidal ideation or suicide attempt based on those definitions, even if the authors use the other terms, such as suicidal thoughts. A single item could be an eligible measurement as long as it assessed suicidal ideation or suicide attempt.

**Additional outcome(s):** 1. Suicide-related behaviors: such as suicidal attitude. 2. The risk factors of suicide: such as hopelessness, interpersonal relationship.

**Data management:** 1. Two review authors (Zhan Yanan, Gao Qi) independently screen the titles and abstracts of all citations according to eligibility criteria. Review authors will be blinded to each other's

decisions. Disagreements will be resolved by discussion and consultation with a third review author(Liu Taosheng) . Sufficient details will be recorded for completing a PRISMA flow diagram. 2、 Two review authors(Zhan Yanan, Gao Qi) extract study characteristics and outcome data using a piloted form. Review authors will be blinded to each other's decisions. Disagreements will be resolved by discussion and consultation with a third review author(Liu Taosheng). 3、 Datas will be entered into Cochrane software Review Manager 5.3. One author(Xu Huijing) enters the details and another author(Zhang Yi) check the data. The details will be compared and the difference will be resolved by discussion and double-check. We record datas on these: basic information(author and year, aim, conclusion, limitation), method, the participant(population description, inclusion criteria, exclusion criteria, number, number of missing, the reason of missing, number of removed, the reason of removed, Baseline imbalances, age, sex, race), intervention(intervention, description, duration, timing, delivery, provider, co-interventions, compliance), comparators, outcome(outcome definition, measurement, scales: upper and lower limits, results, statistical methods), results, note.

#### Quality assessment / Risk of bias analysis:

1、 The risk of bias will be assessed according to the latest version of the Cochrane Handbook, the Cochrane Risk of Bias tool (RoB 2.0) will be used. These characteristics will be assessed(bias arising from the randomization process, bias due to deviations from intended interventions, bias due to missing outcome data, bias in measurement of the outcome, bias in selection of the reported result). 2、 Two review authors(Xu Huijing, Jiang Qian) independently assess the risk of bias and they will be blinded to each other's decisions. Disagreements will be resolved by discussion and consultation with a third review author (Liu Taosheng). 3、 The risk of bias will be categorized as low, unclear,

or high risk of bias. A narrative description of the "risk of bias" assessments and the GRADE assessment (GRADEpro GDT will be used) of the certainty of evidence will be provided in the results section. 4、 Subgroup analysis will be adopted to explore the impact of studies at different levels of risk of bias.

**Strategy of data synthesis:** 1、 We will evaluate heterogeneity between studies using the  $\chi^2$  test,  $I^2$  indicator, and P-value(less than 0.1 will be considered statistically significant). 2、 If heterogeneity isn't so high(P-value does not less than 0.1), we will use a random-effects model and the Dersimonian-Laird method for both dichotomous and continuous outcomes. If meta-analysis is inappropriate owing to significant heterogeneity, subgroup analysis or narrative synthesis will be conducted. 3、 If we could identify more than ten studies, we plan to create a funnel plot to detect possible publication bias and small-trial effects. If there is not sufficient studies, a narrative description of publication bias will be provided.

**Subgroup analysis:** 1、 After we identify heterogeneity, we will plan to present the results of subgroups analysis separately. Considering mental disorders make suicidal symptom complex, adolescents and adults have some unique risk factors of suicide, we plan to examine clinical heterogeneity according to these subgroups: participant: suicide-related symptom, mood disorders, other disorders. Age group: <18 years,  $\geq$ 18 years. comparator: passive control, such as TAU (treatment as usual) or waiting list; active control, such as medication or other psychological therapies. Length of treatment: short version, normal version . 2、 We will conduct meta-analysis using a random-effects model and the Dersimonian-Laird method for both dichotomous and continuous outcomes. 3、 We will conduct a sensitivity analysis by excluding low-quality trials.

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**Sensibility analysis:** We will conduct a sensitivity analysis by excluding low-quality trials.

**Language:** Language restrictions: English and Chinese.

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

**Keywords:** suicide, interpersonal psychotherapy; IPT; suicidal ideation; suicidal behavior; suicidality.

**Dissemination plans:** This review's main conclusion will be integrated into a suicide-related mental health manual and a class-teaching, whose receivers are psychiatrists and psychologists work in the military or other public organizations.

**Contributions of each author:**

**Author 1 - Zhan Yinan -** Screen potential studies and data extraction, data analysis, write the project.

**Author 2 - Gao Qi -** Screen potential studies and data extraction, write the project.

**Author 3 - Xu Huijing -** Risk of bias assessment, GRADE assessment, write the project.

**Author 4 - Jiang Qian -** Risk of bias assessment, write the project.

**Author 5 - Zhang Yi -** Developed the search strategy and write the project.

**Author 6 - Liu Taosheng -** The guarantor of the review, conceived the idea and developed the methodology for this systematic review. write the project and review the project.