

# INPLASY PROTOCOL

To cite: Lin et al. Effect of advanced nursing care on psychological condition in patients with chronic heart failure: a protocol of systematic review and meta-analysis. Inplasy protocol 202040077. doi: 10.37766/inplasy2020.4.0077

Received: 14 April 2020

Published: 14 April 2020

**Corresponding author:**  
Yang Lin

raoqiangtu3496@126.com

**Author Affiliation:**  
First Affiliated Hospital of  
Jiamusi University

**Support:** HLJPHRP (2016-292).

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

**Conflicts of interest:**  
None.

## Effect of advanced nursing care on psychological condition in patients with chronic heart failure: a protocol of systematic review and meta-analysis

Lin, Y<sup>1</sup>; Su, ZQ<sup>2</sup>; Yu, SS<sup>3</sup>.

**Review question / Objective:** Is advanced nursing care (ANC) effective on psychological condition (PC) in patients with chronic heart failure (CHF)?

**Condition being studied:** Chronic heart failure; psychological condition; advanced nursing care.

**Information sources:** We will search blow electronic databases from the beginning up to the February 29, 2020: MEDLINE, EMBASE, Cochrane Library, Web of Science, Scopus, the Cumulative Index to Nursing and Allied Health Literature, the Allied and Complementary Medicine Database, the Chinese Scientific Journal Database, and China National Knowledge Infrastructure. No language and publication status limitations will be applied to all electronic databases. The details of search strategy for MEDLINE will be created. We will adapt similar strategies to other electronic databases. In addition, we will examine conference proceedings, reference lists of included studies, and websites of clinical trials registry.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 14 April 2020 and was last updated on 14 April 2020 (registration number INPLASY202040077).

### INTRODUCTION

**Review question / Objective:** Is advanced nursing care (ANC) effective on psychological condition (PC) in patients with chronic heart failure (CHF)?

**Condition being studied:** Chronic heart failure; psychological condition; advanced nursing care.

---

## METHODS

**Participant or population:** All patients who were diagnosed as CHF with PC will be included in this study, in spite of their country, sex, age, and duration or severity of CHF and PC.

**Intervention:** In the experimental group, all patients utilized ANC to manage PC.

**Comparator:** In the control group, no limitations were limited to the control treatments. However, we will not consider study involved control treatment with any forms of ANC.

**Study designs to be included:** This study will include all potential randomized controlled trials (RCTs) that investigate the effect and safety of ANC on PC in patients with CHF.

**Eligibility criteria:** This study will include RCTs that investigate the effect and safety of ANC vs. other intervention on PC in patients with CHF.

**Information sources:** We will search blow electronic databases from the beginning up to the February 29, 2020: MEDLINE, EMBASE, Cochrane Library, Web of Science, Scopus, the Cumulative Index to Nursing and Allied Health Literature, the Allied and Complementary Medicine Database, the Chinese Scientific Journal Database, and China National Knowledge Infrastructure. No language and publication status limitations will be applied to all electronic databases. The details of search strategy for MEDLINE will be created. We will adapt similar strategies to other electronic databases. In addition, we will examine conference proceedings, reference lists of included studies, and websites of clinical trials registry.

**Main outcome(s):** The primary outcomes are depression (as assessed by any associated scales, such as Hamilton Depression Rating Scale), and anxiety (as evaluated by any relevant tools, such as Hamilton Anxiety Rating Scale).

**Additional outcome(s):** The secondary outcomes are all-cause mortality, urine output, change in serum sodium, health related quality of life (as measured by any related scores, such as 36-Item Short Form Health Survey), and adverse events.

**Data management:** Two reviewers will extract data from each eligible trial separately using previous defined data extraction sheet. Any different opinions will be solved by discussion with a third reviewer. The extracted data includes general information (e.g. first author, year of publication), trial methods (e.g. trial design, trial duration, trial setting), participants (e.g. race, gender, age, severity of PC and CHF), and intervention and controls (e.g. modality types, duration, frequency), outcomes, safety, funding sources, and conflict of interest.

**Quality assessment / Risk of bias analysis:** Two reviewers will appraise risk of bias for each included article using Cochrane Risk of Bias Tool through seven domains. Each one is graded as low, unclear or high risk of bias. All different views will be resolved by a third reviewer through discussion.

**Strategy of data synthesis:** We will employ RevMan 5.3 for statistical analysis. All continuous values will be estimated by mean difference or standardized mean difference and 95% confidence intervals (CIs), and all dichotomous values will be calculated by risk ratio and 95% CIs.  $I^2$  statistic will be utilized to test heterogeneity among included trials.  $I^2 \leq 50\%$  means homogeneity, and a fixed-effect model will be applied.  $I^2 > 50\%$  implies obvious heterogeneity, and a random-effect model will be placed. If possible, we will perform a meta-analysis. Otherwise, we will carry out a subgroup analysis to investigate sources of considerable heterogeneity. If we can still identify significant heterogeneity after subgroup analysis, a meta-analysis will be not been conducted. Instead, a systematic narrative synthesis for study findings will be carried out.

---

**Subgroup analysis:** We will employ a subgroup analysis according to the differences in study characteristics, study quality, and different types of interventions and outcomes.

**Sensibility analysis:** We will undertake a sensitivity analysis to examine the robustness and stability of study findings by eliminating low quality trials.

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

**Keywords:** Chronic heart failure; psychological condition; advanced nursing care; effect.