INPLASY PROTOCOL

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

Conflicts of interest: None.

Psychological effect of comprehensive nursing intervention in elderly patients with perforated peptic ulcer: a protocol of systematic review

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Review question / Objective: Is comprehensive nursing intervention (CNI) effective on psychological disorder in elderly patients with perforated peptic ulcer (PPU)?

Condition being studied: Comprehensive nursing intervention; and perforated peptic ulcer.

Information sources: Electronic database sources - We will retrieve all potential studies from inception to the present in the Cochrane Library, PUBMED, EMBASE, PsycINFO, WANGFANG, CBM, and CNKI. No restrictions will be employed to the language and publication status. We summarize the sample of search strategy for PUBMED. We will also modify similar search strategies for other electronic databases. Other sources - We will search other sources to avoid missing potential studies, such as clinical trial registry, conference proceedings, and reference list of included studies.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 17 August 2020 and was last updated on 17 August 2020 (registration number INPLASY202080069).

INTRODUCTION

Review question / Objective: Is comprehensive nursing intervention (CNI) effective on psychological disorder in elderly patients with perforated peptic ulcer (PPU)?

Condition being studied: Comprehensive nursing intervention; and perforated peptic ulcer.

METHODS

Participant or population: Elderly patients (over 65 years old) with PPU who were also diagnosed as psychological disorder

(including depression and anxiety) will be included, regardless gender, severity of psychological condition and PPU.

Intervention: In the intervention group, all eligible patients administered CNI on psychological disorder.

Comparator: In the control group, all patients underwent other managements will be included. However, we will exclude comparator involving any forms of CNI.

Study designs to be included: This study will include randomized controlled trials (RCTs) of CNI on psychological effect in elderly patients with PPU. We will eliminate other studies, such as non-clinical trial, and uncontrolled trial.

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Main outcome(s): Primary outcome is psychological disorder. It comprises of depression and anxiety, as measured by Beck Depression Inventory and Hamilton Depression Rating Scale, or other relevant scales. Secondary outcomes are health-related quality of life (as assessed by Global Quality of Life Scale), panic (as examined by Panic Disorder Severity Scale), and adverse events.

Data management: Two authors will independently extract data according to the previously designed data extraction form. It includes publication characteristics (such as title, first author, journal, and study design), patient characteristics (such as number of patients, age, gender, diagnosis criteria, and inclusion and exclusion criteria), study methods, details of CNI and controls, outcome indicators, results, conclusion, and follow-up information. Any divergences will be resolved by a third author via discussion.

Quality assessment / Risk of bias analysis: Two authors will independently examine methodological quality of each included study using Cochrane Risk of Bias Tool. We will invite a third author to clear any confusion between two authors.

Strategy of data synthesis: We will use RevMan 5.3 software to conduct statistical analysis. For dichotomous data, we will calculate it as risk ratio and 95% confidence intervals (CIs). For continuous data, We will estimate it as weighted mean difference (MD) or standardized MD and 95% CIs. Statistical heterogeneity will be identified by I^2 test. Values of I^2 illustrate as follows: $I^2 \leq 50\%$ means reasonable heterogeneity, and we will use a fixed-effects model to integrate outcome data. $I^2 > 50\%$ signifies a substantial heterogeneity, and we will employ a random-effects model to combine outcome data. If the extracted data similar sufficiently on the same outcome measurement, we will synthesize those data and will carry out a meta-analysis. If there is remarkable heterogeneity across included studies, we will conduct a qualitative synthesis using narrative summary descriptions. In addition, we will undertake subgroup and sensitivity analysis to investigate the possible reasons of obvious heterogeneity.

Subgroup analysis: We will conduct subgroup analysis to test the sources of significant heterogeneity based on characteristics of study, severity of psychological disorder or PPU, and details of CNI and controls.

Sensibility analysis: We will perform sensitivity analysis to test robustness and stability of the present results by removing studies with low quality and small sample size.

Country(ies) involved: China.

Keywords: Perforated peptic ulcer; comprehensive nursing intervention; psychological effect.

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Author 1 - Bing Chen.
Author 2 - Xiu-yu Liu.
Author 3 - Hong-mei Zhang.
Author 4 - Bai-jun Zhang.
Author 5 - Ying-ting Wang.