Peer Review File

Article information: https://dx.doi.org/10.21037/jtd-23-195

Reviewer A

First, the title needs to indicate the comparisons of first aid and then transportation vs. transportation and then first aid, because both interventions belong to pre-hospital first aid.
Reply: Thank you for your question. the comparisons of first aid and then transportation vs. transportation and then first aid all belong to pre-hospital first aid. We have revised the title.
Changes in the text: Paragraph 1 / Title
Second, the abstract is not adequate and not standardized. The background did not describe the clinical controversy regarding the efficacy and safety of the two treatments and why a meta-analysis is suitable to address this controversy. The methods did not describe the literature search and study inclusion criteria according to the PICOS principles. The results did not describe the sample sizes of the two treatment groups, and the risk of bias of included studies. Given that the included studies are not RCTs and the risk of bias of included studies, the authors need to tone down the current conclusion.
Reply: Thank you for your question. We have revised the abstract section as suggested.
Changes in the text: Paragraph 1-4 / Abstract
Third, it is inadequate to just describe "there is currently no unified consensus on the methods of pre-hospital first aid in clinical practice" as the rationale for this study. Please provide detailed examples on the controversy regarding the relative efficacy and safety of the two treatments, analyze the potential reasons for the controversy, and explain why a meta-analysis is suitable to address the clinical question.
Reply: Thank you for your question. In the introduction, we added controversial points about different pre-hospital treatment methods.
Changes in the text: Paragraph 1 / Introduction
Fourth, in the methodology of the main text, the inclusion criteria must be defined according to the PICOS principles. Please describe the NOS scale in detail including criteria for high and low risk of bias of included studies. Please further clarify whether the extracted effect size measures are adjusted RR or other values. In statistics, please describe the test of sources of heterogeneity, the test of the influence of risk of bias on the pooled results, and ensure $P<0.05$ is two-sided.
Reply: Thank you for your question. We have supplemented the detailed description of the NOS scale in the article. In this paper, the effect quantity is extracted from the original data in the original text. There is no adjusted RR value in the original text. In the meta-analysis results of this article, most of the outcome indicators included in the literature are not heterogeneous, but there is high heterogeneity in the respiratory rate analysis. After analyzing the data, it is found that Han and Liu are two articles, $P<0.05$ is bilateral.
Changes in the text: Paragraph 5-6 / Methods

Reviewer B

In this meta-analysis, the authors investigated the effect of pre-hospital first aid methods on the efficacy and prognosis of acute myocardial infarction with left heart failure. The work is of clinical relevance, and the study design is correct.

Abstract: The database searched and the latest search time should be reported.
Reply: Thank you for your comments. The database searched included PubMed, OVID, Web of Science, EMBASE, China National Knowledge Infrastructure (CNKI), VIP, and Wanfang databases. The search time was updated to December 23, 2022. After adding the search database and the latest search time to the abstract section, we found that the number of words in the abstract exceeded the requirements of the journal. So we didn't add it in abstract. The search database and the latest search time are specified in the first paragraph of the methods.
Changes in the text: None

The structure of the methods section should be corrected. The corrected order of the methods section should be (1) databases used for literature search; (2)inclusion and exclusion criteria; (3)outcome indicators; (4) data extraction and quality assessment.
Reply: Thank you for your comments. We have revised the structure of the methods section.
Changes in the text: Paragraph 1-4 / Methods

A literature search algorithm should be reported.
Reply: Thank you for your comments. We have reported the search algorithm.
Changes in the text: Paragraph 1 / Methods

The study selection process should be reported whether the study selection was performed by two reviewers independently.
Reply: Thank you for your comments. The study selection was performed by two researchers independently. We have reported it in the "Literature quality evaluation and data extraction section" of the methods.
Changes in the text: none

A table should be used to summarize the findings of the meta-analysis.
Reply: Thank you for your comments. The meta-analysis results have been visually displayed in the results of abstract and are not suitable for adding tables.
Changes in the text: none

Lines 263 to 268: these two sentences are confusing. Please rephrase it.
Reply: Thank you for your comments. We have rephrased it.
Changes in the text: Paragraph 1 / Discussion

The limitations of this study should be discussed in the discussion section. A new paragraph should be added.
Reply: Thank you for your comments. We have added it.
Changes in the text: Paragraph 2 / Discussion

Whether the quality assessment was performed independently by two reviewers?
Reply: Thank you for your comments. The quality assessment was performed independently by two reviewers.
Changes in the text: none

Are there any RCTs investigating this topic?
Reply: Thank you for your comments. No RCT literature was found in the literature that we searched and met the requirements of this article.
Changes in the text: none

Flowchart: what does the “Full text available” mean?
Reply: Thank you for your comments. "Full text unavailable" refers to references where the full text cannot be obtained.
Changes in the text: none

Line 88: 2 should be replaced by two. In addition, what does “2 pre-hospital first aid methods” mean? Please provide more details concerning the methods in the discussion section.
Reply: Thank you for your comments. The “2 pre-hospital first aid methods” refer to the intervention group receiving first aid and the transportation, while the control group receiving transportation and then first aid. We have a discussion about them in the discussion. Priority should be given to restoring myocardial perfusion in the intervention group, which is helpful to improve the prognosis.
Changes in the text: Paragraph 1,2 / Discussion

The possible source of heterogeneity should be reported.
Reply: Thank you for your comments. The only heterogeneity in our results is respiratory rate. However, our analysis of the data did not find a possible source of heterogeneity, which may be due to measurement differences in medical institutions. We have described this in the limitations section.
Changes in the text: Paragraph 3 / Discussion

Was the “two pre-hospital first aid methods” the sources of heterogeneity? I suggest the authors performing subgroup analysis.
Reply: Thank you for your comments. The “two pre-hospital first aid methods” were first aid and then transportation in the intervention group, while the control group was transportation and then first aid. The comparison itself is a comparison between two groups, and is not a source of heterogeneity. Therefore, subgroup analysis is not necessary.
Changes in the text: none

Reviewer C

1. Please revise your Title to “a systematic review and meta-analysis”.

1 **Original Article**

2 **Effect of different pre-hospital first aid methods on the efficacy and prognosis of**

3 **acute myocardial infarction with left heart failure: a meta-analysis**

Reply: Thank you for your question. We have revised the title.
Changes in the text: Paragraph 1 / Title

2. Table 1:
1) Please indicate how the data are presented in below variables. For example, mean ± SD or [No.].

	Age (years)		NYHA cardiac function class		Outcome indicators
	Experimental group	Control group	Experimental group	Control group	
	54.60±5.20	53.90±5.00	III [22], IV [14]	III [21], IV [15]	2, 3, 4, 5, 6

Reply: Thank you for your question. We have revised it.

2) It's suggested to replace ? with "NA".

Chen (27)	2016	42	42	22/20	25/17	64.9±?	61.9±?

Reply: Thank you for your question. We have revised it.

3) It's suggested to explain the meaning of NYHA cardiac function class III and IV in table 1 footnote.

Reply: Thank you for your question. We have added it.

3. Figure 2:

1) The data below in your main text is inconsistent with your Figure 2.

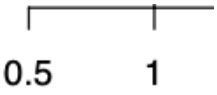
192 heterogeneity among the studies (I^2=30%), so the meta-analysis was carried out by the
193 fixed effect model. The results showed that the clinical effect of pre-hospital first aid
194 first aid and then transfer was significantly better than that of the control group (RR
195 =1.35, 95% CI: 1.27 to 1.45, P<0.01; *Figure 2*)

Reply: Thank you for your question. We have revised it.

2) Please check whether the below word is wrong. If yes, all Figures should be revised.

Heterogeneity: I^2 = 15%, τ^2 < 0.1, p = 0.29

Test for overall effect (common effect): z = 9.11 (p < 0.01)



Reply: Thank you for your question. It is correct.