Peer Review File

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Reviewer A

First, the title needs to indicate the comparisons between comprehensive nursing care and nursing care as usual.

Reply: Thank you for your question. The title has been amended accordingly: Comparing the impact of comprehensive care with usual care in the interventional management of paediatric congenital heart disease: a meta-analysis.

Changes in the text: Paragraph 1 / Title

Second, the abstract is not standardized and needs further revisions. The background did not present the clinical controversy regarding the relative efficacy of comprehensive nursing care vs. nursing care as usual and why a meta-analysis is needed. The methods did not describe the inclusion of studies according to the PICOS principles, the risk of bias assessment of included studies, and data extraction for efficacy outcomes. The results need to describe the total sample sizes and risk of bias of included studies. Given that many studies are of unclear risk of bias, the authors need to town done the current conclusion.

Reply: Thank you for your question. We have revised the abstract as suggested. Changes in the text: Paragraph 1-4 / Abstract

Third, according to the text in the introduction of the main text, it seems that this metaanalysis is not necessary since the superiority of comprehensive nursing care vs. nursing care as usual is undoubted. The authors need to use detailed examples to show the controversy regarding the relative efficacy of comprehensive nursing care vs. nursing care as usual, analyze the potential reasons for the controversy, and explain why a meta-analysis is suitable to address the clinical controversy.

Reply: Thank you for your question. Although there are individual studies that have found the superiority of comprehensive care over usual care, these studies have limited sample sizes and lack reliable evidence to guide clinical practice. Based on this, a meta-analysis of the effect of comprehensive versus usual care on interventions for paediatric congenital heart disease was conducted and is described in the relevant section of this article.

Changes in the text: Paragraph 1/ Introduction

Fourth, in the methodology of the main text, the authors need to additionally search EmBase, clearly describe the inclusion criteria according to the PICOS principles, in particular the definitions of comprehensive nursing care vs. nursing care as usual. The authors need to specify the criteria for low, high, and unclear risk of bias in the Cochrane RoB 2.0 assessment. The items for assessing risk of bias in Figure 2 and

Figure 3 are incorrect, so the results of RoB 2.0 assessment is not convincing in this study. The authors need to recheck this. In statistics, please describe the test of sources of heterogeneity and the influence of the level of RoB on the pooled findings. It is wrong to say "Sensitivity maps were drawn using Stata software". Please describe the details of sensitivity analysis. It is also wrong to describe "Publication bias was tested by Harbord's test" because Harbord's test iis often used to meta-analysis with less than 10 included studies and binary outcomes. Please describe the P value for statistical significance.

Reply: Thank you for your question. An additional search of the Embase database was conducted and no relevant literature was retrieved from the Embase database in accordance with the screening strategy of this paper.

In the methods section of this paper, information relating to study subjects, interventions, controls, outcomes and study type is specified in detail in accordance with PICOS principles.

The criteria for low, high and unclear risk of bias for Rob2 are specified. We apologise that the Cochrane RoB entries originally described in the text for the initial version of seven domains have been changed to the Cochrane RoB version 2.0 for five domains in line with the entries for assessing risk of bias in Figure 2 Figure 3.

In terms of statistics, the impact of RoB levels on the pooled results is described: the results show bias mainly from bias during randomisation and bias from deviation from established interventions.

Details of sensitivity analyses have been described: sensitivity analyses were conducted using a case-by-case exclusion of all literature included for each outcome indicator, examining the impact of individual studies on the overall combined effect size outcome as well as heterogeneity.

The practice of publication bias was modified to use Egger's test.

Described P<0.05 as statistically significant.

Changes in the text: Paragraph 1,2,6,7 / Methods

Reviewer B

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

<u>Comparing the impact</u> of comprehensive <u>care with conventional care</u> in children with congenital heart disease: a meta-analysis ←

Reply: Thank you for your question. The title has been revised.

2. Please check the below Keyword. You choose it as a Keyword but it cannot be found in the main text.

Keywords: Comprehensive <u>care</u>; <u>pediatric congenital heart disease</u>; interventional therapy; meta-analysis

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

3. The below contents are repeated.

tube care, enhanced monitoring, pain care, etc.; (IV) Outcome: The outcome indicators were one or more of postoperative complications (number of cases), puncture time (minutes), pain score (points), surgical operation time (minutes), X-ray exposure time (minutes) and length of hospital stay (days).

↵

The intervention measures adopted by the experimental group were comprehensive cares, and the intervention measures adopted by the control group were conventional interventions. The outcome indicators were one or more of the following: postoperative complications (cases), puncture time (minutes), pain score (points), operation time (minutes), X-ray exposure time (minutes), and hospitalization time (days).

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

4. Reference 31 and 32 are duplicate references in your Reference list. Please check and revise.

Reply: Thank you for your question. We have deleted one.

- 5. Table 1:
- The citation of references below is consistent with Table 1.
 and 11 non-RCT research papers, a total of 24 papers remained (5,10-31). The literature screening process and results are shown in Figure 1.

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

2) Please indicate how the data are presented in below variables. For example, mean \pm SD.

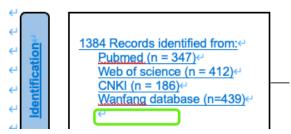
Reply: Thank you for your question. We have added it.

3) The unit "minutes" for Pain score is wrong.

Puncture time	Pain score	Operation time	X-ray exposure	Hospitalization
(minutes)←	(minutes)←	(minutes)←	time (minutes)	time (days)←
_				

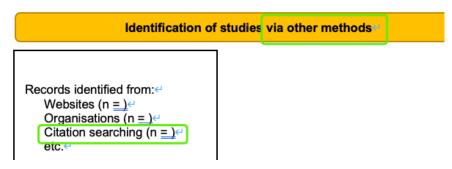
Reply: Thank you for your question. We have revised it.

- 6. Figure 1:
- 1) It's needed to add "Embase (n=0)" in Figure 1.



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

2) In your *Search strategy* section, you mentioned "The references of the obtained literature were also manually traced to ensure that no important research was missed.". In this case, references should be reported via other methods (citation searching, as below). Please redraw your Figure 1 based on the attached template.



Reply: Thank you for your question. This is our clerical error. We have corrected it.

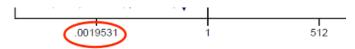
7 Figure 2:

What the meaning of yellow! in your Figure 2? Is it needed to unify yellow! and yellow? in Figure 2?

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

8. Figure 4:

Please complete the number ".xxx" with "0.xxx".



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

9. Figure 10:

Please modify the background color from black to white and resubmit Figure 10 to us. Reply: Thank you for your question. We have corrected it.