PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (http://bmjopen.bmj.com/site/about/resources/checklist.pdf) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Evaluation of Patient Experience in County-level Public Hospitals in China: A Multi-Centre, Cross-sectional Study
AUTHORS	Min, Rui; Li, Lu; ZI, Chunyan; Fang, Pengqian; Wang, Biyan; Tang, Changmin

VERSION 1 – REVIEW

REVIEWER	Ann-Chatrin Leonardsen Østfold University College, Norway and Østfold Hospital Trust,
DEVIEW DETUDNED	Norway
REVIEW RETURNED	04-Jan-2019

GENERAL COMMENTS	Abstract Objectives: Use another terminology than «popular» when referring to the importance of includign patient experiences. Patients' feelings are not adequate either. Please reformulate the objective section: patient experiences is the measure, not a «feeling». Setting & participants: patients were not investigated, but their experiences were. What do the authors mean with «clear consiousness»? Interventions: PPE-15 is a questionnaire, not a scale. Not used to evaluate «feeling», but «experiences». Not «Description» but «Descriptive analysis». And «satisfaction» is something else than «experience»- please reformulate.
	Results: there are outcomes in the results section not presented elsewhere e.g.: loyalty, overall satisfaction (how is this measured?), possibility of re-visiting. Conclusion: needs to be reformulated The abstract needs to be reconstructed/reformulated, a better correlation between objectives, results and conclusion is needed. Keywords: patient experiences should be included
	Bullet points The first bullet point indicate repeated measures? Overall evaluation Check for mis-spellings, upper and lower case writing Check submission guidelines (e.g. tables should be included in text), referencelist not correct
	Tables should be edited/assessed regarding length: e.g. consider the need to include the age-groups in table 2. Satisfaction, loyalty and experiences is used. Satisfaction is not the outcome here. How was loyalty measured? Needs clarification. Background

Line 12: Use updated literature/references to explain why patient experiences are important

Line 20: «Popular» should be replaced with e.g. «acknowledged»? Line 34: Why introduce «patient-centred care»? Why is this important? Relevance to this study's background?

From line 56-57: Should this be the initial introduction in the background section?

The background section needs to be reconstructed/better formulated.

Methods

Rename title according to the Journals' requirements
The section needs to be better constructed. Use e.g. «Inclusion criteria», «exclusion criteria». How was patients' invited/included/selected?

Page 7, line 11-: (investigation method)- not needed, reformulate and gather this information together with information about design or questionnaire

Page 7, line 29-48 should be re-placed to proper section Page 7, line 56: what does the line «the best county-level public hospital» mean?

Page 8, patient experience questionnaire.

Needs better description of the questionnaire: «commonly used»-what do this mean? Is this a valid and reliable tool? How was the translation process conducted? Method for translation? What about validation of the questionnaire in Chinese? How many patients were included in the pilot? Page 8, line 50-: move information about sampling methods to the top of the participants' section. How was this « convenience sampling method» used?

How was the study conducted, by personal interviews base don the PPE-15, or did patients complete the questionnaires themselves.

Suggest to use following titles/subtitles: Methods, Setting, Participants, Questionnaire (and translation procedure), Procedure, Analyses, Ethics (any approvals? Anonymity, confidentiality?, how /where were data recorded/kept?) What is the maximum and minimum score of the PPE-15? Analysis: needs better description of choices

The methods section needs to be refined, better constructed, clarified

Results

Page 10, line 33: what does «valid questionnaires» mean? Percentage responses?

Mean/median age? (not «average»)

Why use «loyalty»?- needs to be better described/explained under the methods section and in the background section.

Loyalty, satisfaction and experiences are used inter-changeably. If all three are measured , this must be explained in the methods section

Use «mean» or «median»- not «average»

Were associations significant? Needs description in text as well.

It could be useful to use subtitles also in the «results» section: e.g. «Sample», «Patient experiences» etc. (and then build up the discussion accordingly) Discussion Page 12: line 9: what is «satisfied experience»? Terms needs to be clarified and sorted out. The discussion section needs better construction, better and more logical structuring (and in-line with the results), exclude information that should be included in the backgroun or setting section (e.g. page 12, line 12-30, line 43-) Study limitations should include an assessment of validity.

reliability, need for sample size-calculation,

Conclusion

This conclusion is not a conclusion but «implications»?

REVIEWER	Wenhua Wang McGill University, Canada
REVIEW RETURNED	05-Feb-2019

GENERAL COMMENTS

As China is moving toward building people-centred integrated health system, actionable performance information from patient perspective could guide current reform efforts. Using a translated Picker patient experience scale (PPE-15), this study evaluated patient experience of county public hospital in China, which made a good contribution of patient experience studies in China. The following comments may help improve the quality of this manuscript.

Background:

- 1. In page 6 line 14-19, the authors reported that "To improve health service quality and fulfil the health demands of rural residents, a comprehensive reform for county-level hospital was launched with pilot counties from 2011 to 2015 and then implemented to all counties after 2015". Please give a brief introduction of the main reform efforts.
- 2. Actually, there are several publications about patient experience or satisfaction of public hospitals (including county hospitals) in China. Please provide justification of the differences between this study and previous studies, and the contribution of this study. Methods:
- 1. Picker patient experience scale (PPE-15) was originally developed to measure inpatients experience. However, both outpatients and inpatients were measured in this study. Please provide your justification.
- 2. The author mentioned "The PPE-15 questionnaire was translated to a Chinese version by professors and students with abundant experience in medical service field research and proficient English translation skills" in page 10 line 12-17. However, it is still not clear enough. Please provide more details about the process.
- 3. The author also reported that a pilot study was conducted in one county hospital in Hubei province, and the PPE-15 showed good internal consistency and structural validity. However, it is not clear how many patients were included in the pilot study, which psychometric analysis methods were used to test the structural validity and the estimated statistics, although Cronbach's α was reported. In addition, what is the total score of PPE-15?

- 4. For the sampling, the author mentioned "After a pilot study in Hubei Province, the main field research was conducted to randomly select one province from eastern, central and western areas. Three counties for each province were chosen by convenience sampling. The best county-level public hospital with the largest health service delivery in the county was selected" at bottom page 7. It seemed that nine hospitals were selected in the three provinces, how does "ten" come in total? In addition, 50 outpatients and 80 inpatients were selected from each hospital. Please provide your justification for sample size calculation. The author reported a total of 1300 patients completed the survey, how many patients were approached initially? 1241 of 1300 survey were valid, how did you define "valid" when making decision to remove the other 59 surveys?
- 5. It is not clear about the survey administration process. For example, when and where did you approach the patients and conducted the survey with the agreed patients? As you know, PPE-15 was conducted by mail in most countries. Will the face-to-face interview method in the hospital setting influence the response of the participants?
- 6. For data analysis, why not conduct a multiple regression model to examine the associations of patient characteristics and PPE dimension scores, and the association of PPE six dimensions and overall satisfaction?

Discussion and Conclusion

1. The current conclusion is a little superficial. Could you add some practice implications? For example, how to integrate patient experience survey in county hospital performance evaluation? How to use patient experience information to inform and guide quality improvement? How to develop some exemplary hospitals with very good patient experience and could be built as a model in the country?

VERSION 1 – AUTHOR RESPONSE

Response to comments of reviewers #1

Thanks for your patient review and advice, Dr Ann-Chatrin Leonardsen. We have rechecked the manuscript for the analysis results and gramma. All the details of changes in the revised version are as follows:

- 1.Abstract
- 1.1 Objectives: Use another terminology than «popular» when referring to the importance of including patient experiences. Patients' feelings are not adequate either. Please reformulate the objective section: patient experiences is the measure, not a «feeling».
- Response: we have reformulated the objective section, and change words in to experience which was more accurate.
- 1.2 Setting & participants: patients were not investigated, but their experiences were. What do the authors mean with «clear consiousness»?
- Response: we changed the description to "who can accurately express their attitude."
- 1.3 Interventions: PPE-15 is a questionnaire, not a scale. Not used to evaluate «feeling», but «experiences». Not «Description» but «Descriptive analysis». And «satisfaction» is something else than «experience»- please reformulate.

- Response: we have reformulated the interventions section, changed the related words to make the description more specific. And also the description for satisfaction and patient loyalty items were added in this part.
- 1.4 Results: there are outcomes in the results section not presented elsewhere e.g.: loyalty, overall satisfaction (how is this measured?), possibility of re-visiting.
- Response: we have rewritten the results section to make it more accurate, and as added descriptions for satisfaction and patient loyalty items in interventions section, we kept the results for satisfaction and patient loyalty items
- 1.5Conclusion: needs to be reformulated
- Response: the conclusion section had been reformulated to make it more related to our findings.
- 1.6 The abstract needs to be reconstructed/reformulated, a better correlation between objectives, results and conclusion is needed.
- Response: The abstract part has been rewrote as the comments adviced.
- 1.7 Keywords: patient experiences should be included
- Response: we added "patient experiences" into keywords.
- 2 Bullet points
- 2.1The first bullet point indicate repeated measures?
- Response: we have rewritten the bullet points.
- 3 Overall evaluation
- 3.1 Check for mis-spellings, upper and lower case writing
- Response: we have checked the word spellings with the help of a professional language editing company.
- 3.2 Check submission guidelines (e.g. tables should be included in text), referencelist not correct
- Response: we have rechecked the submission guidelines to correct the tables and reference style.
- 3.3 Tables should be edited/assessed regarding length: e.g. consider the need to include the agegroups in table 2.
- Response: age is a related factor to patient experience, so we kept it in the tables. Whereas we have changed the age-groups to cut down the table length.
- 3.4 Satisfaction, loyalty and experiences is used. Satisfaction is not the outcome here. How was loyalty measured? Needs clarification.
- Response: the description for satisfaction and patient loyalty items were added in method part to make the study tool more clear.
- 4. Background
- 4.1 Line 12: Use updated literature/references to explain why patient experiences are important
- Response: we have updated the references to explain the importance of patient experiences.
- 4.2 Line 20: «Popular» should be replaced with e.g. «acknowledged»?
- Response: we replaced "popular" with "common".
- 4.3 Line 34: Why introduce "patient-centred care">? Why is this important? Relevance to this study's background?
- Response: we changed the related description of patient-centred care. We think it is an important trend to change the healthcare service system from doctor-centred to patient-centred.

- 4.4 From line 56-57: Should this be the initial introduction in the background section? The background section needs to be reconstructed/better formulated.
- Response: we revised the background part and moved basic introduction of county into the beginning of this section.

5.Methods

5.1 Rename title according to the Journals' requirements

The section needs to be better constructed. Use e.g. «Inclusion criteria», «exclusion criteria». How was patients' invited/included/selected?

- Response: we renamed the title of each section according to the journal's requirement. And we revised the method section and added some description of patient selection.
- 1.2 Page 7, line 11-: (investigation method)- not needed, reformulate and gather this information together with information about design or questionnaire
- Response: we reformulated the investigation method subsection and change the basic introduction in the beginning of method section, also added some related information in questionnaire subsection.
- 1.3 Page 7, line 29-48 should be re-placed to proper section
- Response: we moved this description in study design subsection.
- 5.4 Page 7, line 56: what does the line «the best county-level public hospital» mean?
- Response: we removed the word "best" and changed the description of sample hospitals into "a public hospital with the largest health service delivery in the county" to make it easy to understand.
- 5.5 Page 8, patient experience questionnaire.
- (1) Needs better description of the questionnaire: «commonly used»- what do this mean? Is this a valid and reliable tool? How was the translation process conducted? Method for translation? What about validation of the questionnaire in Chinese?
- (2) How many patients were included in the pilot?
- (3) Page 8, line 50-: move information about sampling methods to the top of the participants' section. How was this « convenience sampling method» used?
- Response: we revised the patient experience questionnaire. (1) added more description of the questionnaire selection reason, translation process. (2) added the description of pilot sample and the validation test result into this section. (3) we moved the sampling into participant subsection, and gave an explain for the performing of convenience sampling method in procedure subsection.
- 5.6 How was the study conducted, by personal interviews based on the PPE-15, or did patients complete the questionnaires themselves.
- Response: personal interviews based on the PPE-15 was conducted, and the related description had been added into the procedure subsection.
- 5.7 Suggest to use following titles/subtitles: Methods, Setting, Participants, Questionnaire (and translation procedure), Procedure, Analyses, Ethics (any approvals? Anonymity, confidentiality?, how /where were data recorded/kept?)
- Response: we changed the subtitles as your advice, and gave more description of the Ethics
- 5.8 What is the maximum and minimum score of the PPE-15?
- Response: The maximum and minimum scores of the PPE-15 were 57 and 15, respectively. This was added in the end of second paragraph in questionnaire subsection.
- 5.9 Analysis: needs better description of choices

- Response: we rewrote the analysis subsection and gave more detail of data type and analysis method.
- 5.10 The methods section needs to be refined, better constructed, clarified
- Response: the whole method section had been revised as your patient advice.

2 Results

- 6.1 Page 10, line 33: what does «valid questionnaires» mean? Percentage responses? Mean/median age? (not «average»)
- Response:
- 6.2 Why use «loyalty»? needs to be better described/explained under the methods section and in the background section.
- Response:
- 6.3 Loyalty, satisfaction and experiences are used inter-changeably. If all three are measured , this must be explained in the methods section.
- 6.4 Use «mean» or «median»- not «average»
- Response:
- 6.5 Were associations significant? Needs description in text as well.
- Response: we added descriptions for associations significance in the « Associations amongst different factors and PPE-15» part. Results also showed in figure 1.
- 6.6 It could be useful to use subtitles also in the «results» section: e.g. «Sample», «Patient experiences» etc. (and then build up the discussion accordingly)
- Response: we changed the subtitles in results section as: «Sample», «Patient experiences», and also divided three parts in the patient experiences evaluation subsection: « Associations amongst different factors and PPE-15», « Satisfaction, Patient loyalty and PPE-15» and « Advanced analysis for PPE-15 dimensions »

3. Discussion

- 7.1Page 12: line 9: what is «satisfied experience»? Terms needs to be clarified and sorted out.
- Response: we added the description of satisfaction and loyalty items in the questionnaire subsection in method section, and the first paragraph of patient experiences evaluation subsection in result section.
- 7.2 The discussion section needs better construction, better and more logical structuring (and in-line with the results), exclude information that should be included in the background or setting section (e.g. page 12, line 12-30, line 43-)
- Response: we rewrote the discussion section: (1) gave a more logical discussion structuring and inline with the results, (2) moved basic information of Chinese health service system (e.g. page 12, line 12-30, line 43-) in the introduction section.
- 7.3 Study limitations should include an assessment of validity, reliability, need for sample size-calculation,
- Response: we rewrote the limitations subsection. The description of validity, reliability and sample size-calculation had been added in the method section (questionnaire subsection and participant subsection).

4. Conclusion

8.1 This conclusion is not a conclusion but «implications»?

- Response: we revised the conclusion section to make it more related to the results and discussion.

Response to comments of reviewers #2

Thanks for your patient review and advice, Dr Wenhua Wang. We have rechecked the manuscript for the analysis results and gramma. All the details of changes in the revised version are as follows:

1. Background:

- 1.1 In page 6 line 14-19, the authors reported that "To improve health service quality and fulfil the health demands of rural residents, a comprehensive reform for county-level hospital was launched with pilot counties from 2011 to 2015 and then implemented to all counties after 2015". Please give a brief introduction of the main reform efforts.
- Response: The reform focused on three aspects: 1) hiring and training highly qualitied staff, 2) improving financial investment, 3) and provision of high-level facilities. The introduction had been added in the introduction section in the third paragraph.
- 1.2 Actually, there are several publications about patient experience or satisfaction of public hospitals (including county hospitals) in China. Please provide justification of the differences between this study and previous studies, and the contribution of this study.
- Response: we added the review of previous studies to provide the importance and significant of the present study in the penultimate paragraph of introduction.

2. Methods:

- 2.1 Picker patient experience scale (PPE-15) was originally developed to measure inpatients experience. However, both outpatients and inpatients were measured in this study. Please provide your justification.
- Response: In China, hospitals provide both inpatient and outpatient services. After an expert consultation and two rounds of group discussion, we used PPE-15 for both inpatients and outpatients experience evaluations to compare different service types. The reason why we used PPE-15 was added in the beginning of questionnaire subsection. And we also mentioned the limitation of the method tool in limitation subsection.
- 2.2 The author mentioned "The PPE-15 questionnaire was translated to a Chinese version by professors and students with abundant experience in medical service field research and proficient English translation skills" in page 10 line 12-17. However, it is still not clear enough. Please provide more details about the process.
- Response: we gave more details of translation process in the questionnaire subsection: "The PPE-15 questionnaire was translated to Chinese by using Brislin's translation model. Orthogonal translation, synthesis, back translation and group discussion were performed by 1 professor and 4 students with abundant experience in medical service field research and proficient English translation skills".
- 2.3 The author also reported that a pilot study was conducted in one county hospital in Hubei province, and the PPE-15 showed good internal consistency and structural validity. However, it is not clear how many patients were included in the pilot study, which psychometric analysis methods were used to test the structural validity and the estimated statistics, although Cronbach's α was reported. In addition, what is the total score of PPE-15?
- Response: (1) 130 patients was involved in the pilot study. This with details for the validity and reliability of the questionnaire had been added in the end of first paragraph in questionnaire subsection. (2) The maximum and minimum scores of the PPE-15 were 57 and 15, respectively. This was added in the end of the second paragraph of questionnaire subsection before table 1 a&b.

- 2.4 (1) For the sampling, the author mentioned "After a pilot study in Hubei Province, the main field research was conducted to randomly select one province from eastern, central and western areas. Three counties for each province were chosen by convenience sampling. The best county-level public hospital with the largest health service delivery in the county was selected" at bottom page 7. It seemed that nine hospitals were selected in the three provinces, how does "ten" come in total?
- Response: The questionnaire was not change after the pilot study, so patients experience of the pilot study sample hospital and other 9 hospitals were analyzed together. That is why there were 10 sample hospitals. The related description was added as the second sentence of the first paragraph in the statistical analysis subsection.
- 2.4 (2) In addition, 50 outpatients and 80 inpatients were selected from each hospital. Please provide your justification for sample size calculation. The author reported a total of 1300 patients completed the survey, how many patients were approached initially? 1241 of 1300 survey were valid, how did you define "valid" when making decision to remove the other 59 surveys?
- Response: (1) the sample size calculation was added in the end of patient participant subsection and also in appendix IV. (2) as we gave the personal interview of patients with convenience sampling method and all the interviews were conducted after medical service, all of 1300 patients participated and completed the survey. It is true that there had been some patients refused the interview initially, but we didn't had records for them. (3) the reasons for removed 59 patients in analysis was in appendix V.
- 2.5 It is not clear about the survey administration process. For example, when and where did you approach the patients and conducted the survey with the agreed patients? As you know, PPE-15 was conducted by mail in most countries. Will the face-to-face interview method in the hospital setting influence the response of the participants?
- Response: the personal interview performed in the department of outpatient and inpatient in the hospital. In China, the mail system is not frequently used in rural area, and the most accurate information in the hospital information system is phone number of patients. Since this involved in patient privacy protection, hospitals would not provide the phone numbers to us. And after a discussion with our volunteers, the most two concern that patients refused to evaluate their experience of feelings for the service were that it would influence the attitude of medical staff and affect their medical service. So a face to face interview was performed with students from our college (third-sector) after their service.
- 2.6 For data analysis, why not conduct a multiple regression model to examine the associations of patient characteristics and PPE dimension scores, and the association of PPE six dimensions and overall satisfaction?
- Response: we added a multiple regression analysis to examine the associations of patient characteristics and PPE dimension scores in the « Associations amongst different factors and PPE-15» part. We added a multiple regression analysis to the association of PPE six dimensions and overall satisfaction in the « Advanced analysis for PPE-15 dimensions » part. Results also showed in figures 1&2.
- 3. Discussion and Conclusion
- 1. The current conclusion is a little superficial. Could you add some practice implications? For example, how to integrate patient experience survey in county hospital performance evaluation? How to use patient experience information to inform and guide quality improvement? How to develop some exemplary hospitals with very good patient experience and could be built as a model in the country?
- Response: we rewrote the conclusion section, and added some specific practice implications.

REVIEWER	Ann-Chatrin Leonardsen
	Østfold Hospital Trust
	Norway
REVIEW RETURNED	12-Mar-2019

GENERAL COMMENTS

Review of manuscript: Evaluation of Patient Experience in Countylevel Public Hospitals in China: A Multi-Centre 4 Empirical Study Based on Picker Patient Experience Questionnaire

General comments: there are still mis-spellings and changes in time of verbs (e.g. line 7/8 abstract "were" / "can") that have to be edited.

Line 9, not "interventions", but "Methods"? And since it is referred to dimensions under results, these should be described under methods.

Line 10: needs clarification/restructuring of sentence. Is it patient loyalty or custom loyalty?

Results abstract: please present max-min values of PPE-15 The conclusion is not a conclusion?

In page 4, line 5 the authors present the study as a "crosssectional data study" which has not been presented in the abstract.

Page 4, line 9: suddenly, the authors use "feelings" and not "experiences"

Page 4, line 11-12: suddenly the authors introduce "the reform". Which reform? Should be included in the abstract if this is of importance?

Page 5, line 3, what do the authors mean by "county"?

Introduction: The whole introduction needs to be "tightened" up, there is a lot of senteces that do not make sense, and is taken out of context. E.g. why "attitude"?

I do not find Herzbergs theory relevant in this case, since there is a lot of updated research on patient experiences and healthcare quality.

Page 5, from line 5- very unspecific.

Authors need a clarification of terms: attitudes, perceptions, feeling, satisfaction, experiences- and patient centredness,,,, Moreover, there is a lot of mis-spellings: authors should get the manuscript reviewed by professionals before re-submittance

Methods: Much information under design belongs under a "setting"-heading. How was invitation/recruitment conducted? This information should come together with sample presentation. What are inclusion criteria? Do not mention questionnaires that are not used. You do not aim at comparing with other studies! Needs more description of the other questionnaires.

Page 10: do not present results under methods section. Describe the scoring and maximum-minimum values of the PPE-15 and the other scales.

The whole methods section also needs to be "tightened" and clarified.

Page 11-12: user/public participation should not be presented in total. I suggest the following structure: design, setting, participants, questionnaires, analysis, ethics,,, There is a gap between the analysis section (p<.05) and results (99% level). The results and analysis needs to be reviewed by a statistician. Abbreviations needs to be explained in tables The authors present non-parametric test, yet they use mean values. Why?
Discussion: this section unfortunately also needs better structure, better language and proof-reading.

REVIEWER	Wenhua Wang McGill University
	Canada
REVIEW RETURNED	03-Apr-2019

GENERAL COMMENTS	Thank you for the author's revision. I have no further comments.
------------------	------------------------------------------------------------------

VERSION 2 – AUTHOR RESPONSE

Response to comments of reviewers #1

Thanks for your patient review and advice, Dr Ann-Chatrin Leonardsen. We have rechecked the manuscript for the analysis results and gramma. All the details of changes in the revised version are as follows:

- 1.General comments:
- 1.1there are still mis-spellings and changes in time of verbs (e.g. line 7/8 abstract "were" / "can") that have to be edited.
- Response: We had re-checked the mis-spellings word with the help of a professional editing company.
- 1.2 Line 9, not "interventions", but "Methods"? And since it is referred to dimensions under results, these should be described under methods.
- Response: we had changed "interventions" to "Methods", and added descriptions of dimensions of PPE-15 scale.
- 1.3 Line 10: needs clarification/restructuring of sentence. Is it patient loyalty or custom loyalty?
- Response: This would be patient loyalty not customer loyalty. In the present study, we regarded patients as customer of healthcare service of hospitals, so we classified patient loyalty as customer loyalty. For easier understanding, we changed this as patient loyalty both in abstract and main text.
- 2. Abstract & Bullet points
- 2.1Results abstract: please present max-min values of PPE-15
- Response: we added the result of max-min values of PPE-15 in abstract section.
- 2.2The conclusion is not a conclusion?

- Response: we rewrote the conclusion in abstract.
- 2.3 In page 4, line 5 the authors present the study as a "cross-sectional data study" which has not been presented in the abstract.
- Response: we added the description of "cross-sectional data study" in the METHOD part of ABSTRACT.
- 2.4 Page 4, line 9: suddenly, the authors use "feelings" and not "experiences"
- Response: we rewrote the bullet points. We have changed the description and changed "feelings" with "experiences".
- 2.5 Page 4, line 11-12: suddenly the authors introduce "the reform". Which reform? Should be included in the abstract if this is of importance?
- Response: we had added a description of China's New Healthcare Reform in the abstract, which was mentioned in bullet point in the round 1 version.
- 3. Introduction

Page 5, line 3, what do the authors mean by "county"?

- Response: We had changed the orders of each paragraph.

Introduction: The whole introduction needs to be "tightened" up, there is a lot of senteces that do not make sense, and is taken out of context. E.g. why "attitude"?

- Response: we had rewritten the background part to make it more logical. County-level hospitals play an important role in the basic healthcare service in China. The present study focused on the patient experience in county-level hospitals in China. We gave the basic introduction of county and county hospitals for the easier understanding and also showed the importance of county-level hospitals in the guarantee of health of rural residents.

I do not find Herzbergs theory relevant in this case, since there is a lot of updated research on patient experiences and healthcare quality.

- Response: We have to admit that there were no cases related to Herzbergs theory. We just wanted to use the theory for the understanding of patient's demand in the previous versions. In this version, we had deleted the Herzbergs theory part in INTRODUCTION section to make the description of introduction more tightened.

Page 5, from line 5- very unspecific. Authors need a clarification of terms: attitudes, perceptions, feeling, satisfaction, experiences- and patient centredness,,,,

- Response: we had rewritten the introduction part and gave related clarification of patient satisfaction, patient experiences and patient-centred healthcare service. We tried to use attitude, perception, thought and feeling to explain satisfaction and experience, which were widely accepted definitions and also had references. And actually we had no idea how to make more specific clarify these basic or common terms, like attitude, perception, thought and feeling, in organizational behavioral science or psychology. So we deleted attitude, perception, or feeling and only remained "thoughts" to give the explanation of the present study about patient experiences.

Moreover, there is a lot of mis-spellings: authors should get the manuscript reviewed by professionals before re-submittance

- Response: We had re-checked the mis-spellings word with the help of a professional editing company.
- 4.Methods
- 4.1 Much information under design belongs under a "setting"-heading.
- Response: we changed the first sub-section of methods into "Study design & Setting", as we thought it was hard to clearly separate the study design and settings of the present study.
- 4.2 How was invitation/recruitment conducted? This information should come together with sample presentation.
- Response: Convenience sampling is a type of sampling where the first available primary data source will be used for the research without additional requirements. In other words, this sampling method involves getting participants wherever you can find them and typically wherever is convenient. According to the definition of convenience sampling, we changed the second sub-section of methods into "Patient participant & Procedure". Meanwhile, according to the comment that the invitation/recruitment method should come together with sample presentation, we rewrote "Patient participant & Procedure" part to make it more specific to explain the convenience sampling procedure, which we used the "procedure" part to explain the recruitment process in the previous version.
- 4.3 What are inclusion criteria?
- Response: the inclusion criteria were located in the third paragraph in "Patient participant & Procedure" subsection.
- 4.4 Do not mention questionnaires that are not used. You do not aim at comparing with other studies! Needs more description of the other questionnaires.
- Response: we deleted the other questionnaires that were not used.
- 4.5 Page 10: do not present results under methods section.
- Response: we moved the results of validity and reliability test and the maximum and minimum scores in the results part.
- 4.6 Describe the scoring and maximum-minimum values of the PPE-15 and the other scales.
- Response: the score and maximum-minimum values were presented in the first sentience in "Patient experiences evaluation" in RESULT section.
- 4.7 The whole methods section also needs to be "tightened" and clarified.
- Response: we had rewritten the METHOD section to make it more tightened.
- 4.8 Page 11-12: user/public participation should not be presented in total.
- Response: The patient participation was a separated subsection in ""Patient participant & Procedure". These part was showed according to comments of editors in last review letter, so as the box 1 was presented as the journal's style. And, everyone could be sick and find help of medical staff for themselves or their family or friends, which meant that not only patients but other public had their opinions for experiences in hospitals.
- 4.9 I suggest the following structure: design, setting, participants, questionnaires, analysis, ethics,,,
- Response: we had re-structured the method section as the comment of Dr. Ann-Chatrin.

- 5. Results
- 5.1 There is a gap between the analysis section (p<.05) and results (99% level).
- Response: we deleted the results of 99% level, only remain the results in significant of p<.05. But there were some p values less than 0.001, and could not be presented in SPSS, which we presented as P<0.001.
- 5.2 The results and analysis needs to be reviewed by a statistician.
- Response: we got help from Dr. Gan Yong and Dr. Zhang Zinan who were good at statistical analysis.
- 5.3 Abbreviations needs to be explained in tables
- Response: all the abbreviations had been explained in tables.
- 5.4 The authors present non-parametric test, yet they use mean values. Why?
- Response: These should be Pearson test, and we changed the analysis method and showed the new results in the related part.

6. Discussion

this section unfortunately also needs better structure, better language and proof-reading.

- Response: we had rewritten the DISCUSSION section, and found help from professional language editing company.

VERSION 3 - REVIEW

REVIEWER	Ann-Chatrin Leonardsen Østfold University College
	Østfold Hospital Trust
REVIEW RETURNED	07-May-2019

GENERAL COMMENTS	Review of: Evaluation of Patient Experience in County-level Public Hospitals in China: A Multi-Centre Empirical Study Based on Picker Patient Experience Questionnaire The study is interesting and extensive, and findings important to present. Neverteheless, the manuscript still contains misspellings and contained that are difficult to interest, and could be positive.
	sentences that are difficult to interpret, and could benefit from professional English editing: E.g. under methods in the abstract: what is the meaning of the sentence: "The Picker Patient Experience questionnaire (PPE-15) was used to evaluate patient experience during their visit in hospitals, and also the overall satisfaction, patient loyalty was asked". Or from the introduction: "However, from the view of demander, one important and obvious factor influencing patients' choice of hospital is their experience or thoughts when receiving medical services[1, 5, 6], which involves to make patients happier during their, also the opportunity to express the concern, anxiety, fear, and the pain they may suffer".

There is an inconsistency in terms; experience, "happiness", concern etc.

In addition the manuscript should be reviewed by a statistician, since the understanding and presentation of statistics seems limited: "The better the patient experience and satisfaction, the higher the patient loyalty. Patients with different age groups, education levels, marital status, and occupation status showed significant difference in patient experience." Should be presented with p values, OR or Beta and correlations.

What is the max and min score of the PPE-15?

REVIEWER	Petros Galanis National & Kapodistrian University of Athens, Athens, Greece
REVIEW RETURNED	13-Jun-2019

GENERAL COMMENTS

Dear Authors, please take into your consideration the following suggestions.

- Dear Authors, your paper needs a serious review and editing to increase clarity and flow. I suggest that a native English speaker should check your manuscript or a professional editing service. There are numerous syntax and grammatical issues, which make the understanding of the manuscript difficult. Here are a few examples:
- 1. Healthcare service quality improvement (page 2). Instead: Healthcare services improvement
- 2. ...to determine the influencing factors in improving ... (page 2). Instead: to determine the factors that influence
- 3.a cross-sectional data study with... ... (page 2). Instead: ...a cross-sectional study with...
- Tables 1 and 2 should be included in the appendix.
- Specify the statistical methods more appropriate. For example, how did you construct the multivariate models? Why did you perform the specific bivariate analysis? Which are the independent and the dependent variables?
- Also, you have to present the results of multiple regression analysis in a different way to increase clarity. In that case, you have to present clearly coefficients beta, 95% CI, p-values, and adjusted R2 for the independent variables. Figure 1 and 2 are confusing and meaningless. You should make Tables for regression models and you should not use outputs of SPSS in your manuscript. Also, you should rely on regression analysis results and not on your bivariate analysis. So you have to re-write the Results section, relying on regression analysis.
- Through the Tables, please mention the statistical test that you used to calculate p-values.

Response to reviewers' comments

Thank you for your consideration again and we look forward to hearing from you.

reviewers #1

Thanks for your patient review and advice, Dr Ann-Chatrin Leonardsen. We have rechecked the manuscript, and got help from a professional language company "editage"(https://www.editage.com/). All the details of changes in the revised version are as follows:

Comment 1.the manuscript still contains misspellings and sentences that are difficult to interpret, and could benefit from professional English editing:

E.g. under methods in the abstract: what is the meaning of the sentence: "The Picker Patient Experience questionnaire (PPE-15) was used to evaluate patient experience during their visit in hospitals, and also the overall satisfaction, patient loyalty was asked". Or from the introduction: "However, from the view of demander, one important and obvious factor influencing patients' choice of hospital is their experience or thoughts when receiving medical services[1, 5, 6], which involves to make patients happier during their, also the opportunity to express the concern, anxiety, fear, and the pain they may suffer".

There is an inconsistency in terms; experience, "happiness", concern etc.

- Response: We had rechecked the main text and re-edited the manuscript with a American professional editing company again.

Comment 2.In addition the manuscript should be reviewed by a statistician, since the understanding and presentation of statistics seems limited: "The better the patient experience and satisfaction, the higher the patient loyalty. Patients with different age groups, education levels, marital status, and occupation status showed significant difference in patient experience." Should be presented with p values, OR or Beta and correlations.

- Response: we did get help from statisticians in our university. Prof. Fu Qiang, Dr. Gan Yong and Dr. Zhang Zinan helped us in the re-analysis and re-wrote process.

Comment 3. What is the max and min score of the PPE-15?

- Response: the score and maximum-minimum values were presented in both abstract and the RESULT section: "A total of 1,241 valid questionnaires were analysed. The average PPE-15 score was 41.33 (range, 23 to 56)."; "The maximum and minimum PPE-15 score were 56 and 15 respectively."

reviewers #3

Thanks for your patient review and advice, Dr Petros Galanis. We have rechecked the manuscript, and got help from a professional language company "editage" (https://www.editage.com/) All the details of changes in the revised version are as follows:

Comment 1- Dear Authors, your paper needs a serious review and editing to increase clarity and flow. I suggest that a native English speaker should check your manuscript or a professional editing service. There are numerous syntax and grammatical issues, which make the understanding of the manuscript difficult. Here are a few examples:

- 1. Healthcare service quality improvement (page 2). Instead: Healthcare services improvement
- 2. ...to determine the influencing factors in improving ... (page 2). Instead: to determine the factors that influence
- 3. ...a cross-sectional data study with... (page 2). Instead: ...a cross-sectional study with...

- Response: we found help from a professional language company for the grammar and spelling. But we kept "Healthcare service quality". healthcare service improvement is overbroad and covered many fields, which quality improvement is one of them.

Comment 2: Tables 1 and 2 should be included in the appendix.

- Response: we have moved table 1 into the appendix. According to the statisticians in our university, we kept table 2 in the main text.

Comment 3:Specify the statistical methods more appropriate. For example, how did you construct the multivariate models? Why did you perform the specific bivariate analysis? Which are the independent and the dependent variables?

- Response: we have rewritten the statistical analysis part to give more information of the analysis methods or model. And we changed the results section.
- 1.Demographic and other basic information were analyzed both the Pearson correlation analysis and then the multiple line regression analysis to determine the factors affecting patient experience during visiting time (the dependent variables, PPE-15 score and overall satisfaction, respectively).
- 2. After the literate review, the previous study showed that patient experience, satisfaction and patient loyalty or the re-visiting possibility are important indicators reflecting the service quality of hospitals, and some research have pointed out that there were correlations, but there were lack of evidence. In that situation, we gave the gamma grade correlation analysis between PPE-15 items and overall satisfaction, and Pearson correlation between patient satisfaction-loyalty, and experience (PPE-15)-loyalty (P<0.01).

Comment 4: analysis

- 4.1. you have to present the results of multiple regression analysis in a different way to increase clarity. In that case, you have to present clearly coefficients beta, 95% CI, p-values, and adjusted R2 for the independent variables.
- Response: we have changed related tables and results.
- 4.2 Figure 1 and 2 are confusing and meaningless. You should make Tables for regression models and you should not use outputs of SPSS in your manuscript. -Response: we have changed the regression results into tables.
- 4.3 you should rely on regression analysis results and not on your bivariate analysis. So you have to re-write the Results section, relying on regression analysis.
- Response: we have rewrote the results section and the discussion section.
- 4.4 Through the Tables, please mention the statistical test that you used to calculate p-values.
- Response: we changed the descriptions of results on tables and figures, and added the analysis method or statistical test both in method part and result part.

Response to reviewers' comments

You have cited 'reference 41, 42' after 'reference 38' which makes your citations incorrect. Please review again the main document and ensure that all references are cited in ascending order."

- Response: we changed the references orders.

VERSION 4 - REVIEW

REVIEWER	Petros Galanis
	National and Kapodistrian University of Athens
	Athens, Greece
REVIEW RETURNED	08-Aug-2019

GENERAL COMMENTS

Dear Authors

I appreciate your efforts to improve the quality of your work according to my revision. You performed many changes but there are still significant problems with your manuscript.

First of all, there is major confusion about your dependent and independent variables. You should clearly write in a paragraph your dependent and independent variables, e.g. in page 11 you mention the overall satisfaction as the dependent variable, while in the abstract and in page 7 you mention the experience as the dependent variable.

Also, you present your results in a misunderstanding way that confuse the readers. For example figures 1 and 4 do not add significant information since a table with descriptive measures is a much better presentation of these results.

Also, an experienced statistician should check your analysis, e.g. you write that Kaiser-Meyer-Olkin (KMO) was used to assess the reliability test of the questionnaires but this test is only for the validity analysis (confirmatory factor analysis). Also, you performed linear regression analysis but you write line regression. Also, in the Discussion section, you write only one paragraph about your regression results and the correlations. You should emphasize on the results of the correlations instead of the results of descriptive analysis.

Finally, your paper needs serious review and editing to increase clarity and flow. I suggest that a native English speaker should check your manuscript or professional editing service. There are numerous syntax and grammatical issues, which make the understanding of the manuscript difficult.