# PEER REVIEW HISTORY

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

This paper was submitted to a another journal from BMJ but declined for publication following peer review. The authors addressed the reviewers' comments and submitted the revised paper to BMJ Open. The paper was subsequently accepted for publication at BMJ Open.

(This paper received three reviews from its previous journal but only two reviewers agreed to published their review.)

# ARTICLE DETAILS

TITLE (PROVISIONAL)	A cross-sectional survey on job satisfaction and its associated
	factors among doctors in tertiary public hospitals in Shanghai,
	China
AUTHORS	Liu, Jiazhen; Yu, Wenya; Ding, Tao; Li, Meina; Zhang, Lulu

## **VERSION 1 – REVIEW**

REVIEWER	Peng Xie
	Chongqing Medical University, China
REVIEW RETURNED	13-May-2018

GENERAL COMMENTS	This paper explored the job satisfaction of doctors in 11 tertiary public hospitals in Shanghai, and examined the influencing factors of satisfaction and work condition The authors pointed that doctors' job satisfaction was related with professional title, types of patients that doctors satisfied or expected, working stress and its reflections, department, working hours, life stress, and patients' respect, which was studied extensively by the researchers. This research is not innovative enough. The decision for this paper is reject.
	Major Comments:
	Title We can see the main contents of this study were "job satisfaction" and "work condition"; however, the description of "work condition" in the text is not clear.
	Abstract The statistical method and the statistics should be described; and the dependent variables and independent variables in the logistic model should be presented.
	Strengths and limitations of this study Here the authors just focus on the work condition, please add job satisfaction for this.
	Statistical analysis: 1. The authors said "Chi-square tests were employed to test the relation between satisfaction and other factors", this description is improper.

2. The detail of logistic regression analysis was not described, including independent variables and dependent variables, variable selection method (enter model, backward elimination method, and forward elimination method), variable screening criteria, collinearity, etc.

## Result

1. In the section of Results, the authors should avoid duplicate content in the text and tables.

#### Minor Comments:

## Background

- 1. "As the great importance of job satisfaction, studies have explored a lot about job satisfaction, including the status of different dimensions about job satisfaction, a large number of surveys on job satisfaction and its influencing factors, and interrelationships between burnout, work stress, mental health and job satisfaction among doctors, nurses, and medical staff in different departments, regions and countries." Please add a reference, and it would be better if some data were showed in figures.
- 2. "It was discovered that many factors had an influence on job satisfaction, including job pressure, interrelationships with patients and......department." This sentence is too verbosely, please make this sentence clearly and concisely.

# Instrument Development and Validation

1. "The questionnaire was designed based on the 5th National Health Service General Research by the National Health and Family Planning Commission of the People's Republic of China", Please add a reference.

## Results

- 1. "897 questionnaires were given out to doctors and all were returned. Among 897 questionnaires" This sentence has been mentioned in the subjects, please simplification;
- 2. "Most participants were doctors (87.3%), only a 132 small of them were directors (7.5%), unspecified staff (4.9%), and researchers (0.3%)." The objects of this study were doctors, why directors and unspecified staff were included.

Univariate analysis of job satisfaction and its influencing factors

1. Please added the value of Chi-square tests.

# Discussion

- 1. "Based on this survey only 51.2% doctors were satisfied with types of patients they diagnosed, and the most were those with common diseases, which was the key leading to doctors' job dissatisfaction" Please specify this finding in more detail.
- 2. "Fifth, it means a lot for doctors whether patients respect....."
  This part is unclear; how patient's respect influence doctors satisfaction?

REVIEWER	Oluwaseun Akinyemi College of Medicine, University of Ibadan Nigeria
REVIEW RETURNED	13-Aug-2018

GENERAL COMMENTS	Interesting study. While I appreciate that English is not the primary
	language of the editors, there might be need to ask an English
	editor to read through in order to correct grammatical and

typographical errors and make the manuscript more readable. Also, more work is needed to make the Methods section more
detailed especially concerning the sampling. The tables also need some editing. Please find attached the revised manuscript for
more detailed comments on the manuscript.
The reviewer also provided a marked copy with additional
comments. Please contact the publisher for full details.

REVIEWER	Segun Bello
	Segun Bello
REVIEW RETURNED	27-Aug-2018

# GENERAL COMMENTS This paper examined the job satisfaction among medical doctors in public hospitals in Shanghai, China using a cross-sectional survey method. Response rate was good. Findings may contribute important evidence for policy makers and employers. Major highlights for revision 1. Instrument should be briefly described in the abstract. 2. The use of the phrase 'working condition' in the title is misleading; suggest replace with 'factors' which appears more appropriate in this context. Working conditions may just one of the 'factors'. 3. Line 87 '...1000 doctors in 11 public hospitals were selected at random'; there was no description of how the sampling was done. For example, readers may desire to know out of how many and how the final respondents were reached. 4. Authors need to describe how variables were screened and finally selected into the model. As it is, it does not look organised. In the opinion of the reviewer, the patients' characteristic/composition included were too many and were probably highly correlated and may have resulted in type 1 statistical error. 5. Conclusion and recommendations were not based on findings from the study. For example, line 293 mentions working hours, patients' respect and department as factors which did not even appear in the logistic regression model. 6. Line 134; what does 'totally reach the hospital requirement on their working...' mean? It is not clear; is it hospital target of number of patients treated? It needs to be specific. 7. Some terms as used were unclear. Could the authors explain the meaning of 'considering work intensity' and 'bad social evaluation' in the methods? a. Line 23/24 (abstract) could be amended to read 'Doctors in public hospitals of China face considerable pressure which are likely to predispose to job dissatisfaction...' a. The paper would benefit from review of the grammar. There are

too many

grammatical errors all over the manuscript that would make it difficult for readers to

comprehend. I give examples:

- Line 30, voluntary should be volunteered
- Line 56, Germany should be properly spelt
- Line 64, delete 'to'
- Line 70, replace 'a' with 'more than'
- Line 78, replace 'were' with 'are'
- Line 90, replace 'were voluntary' with 'volunteered' and 'can' with 'could'
- Line 106, replace 'multiple-choice' with 'structured'
- Line 113, delete 'completed'
- Line 114, replace 'observational' with 'dependent'
- Line 117, replace 'voluntary' with 'volunteering'
- Line 122, replace 'relations' with relationship
- Line 157, delete 'were'
- Line 183, insert 'who' to read 'doctors who did not expect patients.......'
- Line 186, replace '.....those without a clear feeling about this question' with those

not satisfied with the type of patient

- Line 189, replace 'shared' with 'had'
- Line 193, insert 'by' to read '.....doctors' job satisfaction was influenced by their.......'

#### **VERSION 1 – AUTHOR RESPONSE**

#Reviewer: 1

**Reviewer Name: Peng Xie** 

Institution and Country: Chongqing Medical University, China

This paper explored the job satisfaction of doctors in 11 tertiary public hospitals in Shanghai, and examined the influencing factors of satisfaction and work condition The authors pointed that doctors' job satisfaction was related with professional title, types of patients that doctors satisfied or expected, working stress and its reflections, department, working hours, life stress, and patients' respect, which was studied extensively by the researchers. This research is not innovative enough. The decision for this paper is reject.

## Major Comments:

1. Title

We can see the main contents of this study were "job satisfaction" and "work condition"; however, the description of "work condition" in the text is not clear.

Response: We agree. Working condition is more appropriate to be one of the factors of doctors' job satisfaction, which is also pointed out by reviewer 3. Therefore, we revised the title as "A cross-sectional survey on job satisfaction and its associated factors among doctors in tertiary public hospitals in Shanghai, China".

2. Abstract

The statistical method and the statistics should be described; and the dependent variables and independent variables in the logistic model should be presented.

Response: Thank you and apologies. We added more descriptions about the dependent variable and independent variables in Abstract section. Please see extensive changes on pp. 2, line 35, 39-42.

3. Strengths and limitations of this study

Here the authors just focus on the work condition, please add job satisfaction for this.

Response: Thank you. We added job satisfaction for this part and made some revisions as well. Please see extensive changes on pp. 4.

4. Statistical analysis:

The authors said "Chi-square tests were employed to test the relation between satisfaction and other

factors", this description is improper.

Response: Thank you and apologies. Chi-square tests were employed to test the differences in job satisfaction among doctors with different personal characteristics and other factor. Please see the change on pp. 9, line 154-155.

5. The detail of logistic regression analysis was not described, including independent variables and dependent variables, variable selection method (enter model, backward elimination method, and forward elimination method), variable screening criteria, collinearity, etc.

Response: We added more detail about logistic regression analysis. The dependent variable was doctors' job satisfaction. The independent variables entered into the logistic regression analysis were those statistically significant to doctors' job satisfaction in univariate analysis. We made a multicollinearity analysis to test collinearity. The variable selection method was stepwise selection method. Please see extensive changes on pp. 9, line 157-162, and pp. 10-11, line 211-215. The collinearity analysis results can be seen in Supplementary Table 1.

In the section of Results, the authors should avoid duplicate content in the text and tables.

Response: Apologies. We revised the whole part of Results and deleted some duplicate information. Please see extensive changes on pp. 9-12, line 168-225.

Minor Comments:

7. Background

"As the great importance of job satisfaction, studies have explored a lot about job satisfaction, including the status of different dimensions about job satisfaction, a large number of surveys on job satisfaction and its influencing factors, and interrelationships between burnout, work stress, mental health and job satisfaction among doctors, nurses, and medical staff in different departments, regions and countries." Please add a reference, and it would be better if some data were showed in figures. Response: We have added some related references. Please see extensive changes on pp. 5, line 61-67.

8. "It was discovered that many factors had an influence on job satisfaction, including job pressure, interrelationships with patients and.......department." This sentence is too verbosely, please make this sentence clearly and concisely.

Response: Thank you. It was also pointed out by another reviewer. We made some more revisions on this part to make it more clearly and concisely. Please see extensive changes on pp. 5, line 68-77.

9. Instrument Development and Validation

"The questionnaire was designed based on the 5th National Health Service General Research by the National Health and Family Planning Commission of the People's Republic of China", Please add a reference

Response: Please see the reference 32 on pp. 7, line 120.

10. Results

"897 questionnaires were given out to doctors and all were returned. Among 897 questionnaires" This sentence has been mentioned in the subjects, please simplification;

Response: Thank you. We deleted this sentence to avoid duplication. Please see the change on pp. 9. Results.

11. "Most participants were doctors (87.3%), only a 132 small of them were directors (7.5%), unspecified staff (4.9%), and researchers (0.3%)." The objects of this study were doctors, why directors and unspecified staff were included.

Response: We apologized for the unclear description. All participants in this study were doctors. Because one question in the survey was about participants' position, doctors should choose from directors, doctors, researchers, and unspecified staff. The unspecified staff were doctorial students studying and working in these hospitals. Because they were still students, they have to choose this position. Please see the changes on pp. 8, line 129-131.

12. Univariate analysis of job satisfaction and its influencing factors Please added the value of Chi-square tests.

Response: Thank you. We added the chi-square values in the revised manuscript on pp. 11, line 195-209. More values can be seen from Tables 1-3.

13. Discussion

"Based on this survey only 51.2% doctors were satisfied with types of patients they diagnosed, and the most were those with common diseases, which was the key leading to doctors' job dissatisfaction" Please specify this finding in more detail.

Response: Thank you. We added more explanations about this finding. Such job

dissatisfaction was derived from the gap between doctors' expectations and the reality. Please see extensive changes on pp. 13, line 250-255.

14. "Fifth, it means a lot for doctors whether patients respect....." This part is unclear; how patient's respect influence doctors satisfaction?

Response: Thank you and apologies. We added clearer explanations about the relationship between patients' respect and doctor's job satisfaction. Patients' respect means great recognition of their doctors, and such good aspects would accelerate doctors' enthusiasms of their work, which then reflected as job satisfaction. Please see the changes on pp. 15-16, line 301-304.

#Reviewer: 2

Reviewer Name: Oluwaseun Akinyemi

Institution and Country: College of Medicine, University of Ibadan, Nigeria

1. Interesting study. While I appreciate that English is not the primary language of the editors, there might be need to ask an English editor to read through in order to correct grammatical and typographical errors and make the manuscript more readable.

Response: Thank you and apologies. We have polished up the language and corrected grammatical and typographical errors. Please see the revised manuscript.

2. Also, more work is needed to make the Methods section more detailed especially concerning the sampling.

Response: We added more detail about sampling and statistical analysis in the Methods section. Please see extensive changes on pp. 7, line 107-113.

3. The tables also need some editing.

This table is too long. A table must not be longer than one page. This table can conveniently be divided into 3 or more.

Again, this table is too long./ Authors should break into manageable sizes - each table not longer than a page.

There are too many subgroups in this category, 3 to 5 groups would have sufficed.

Response: Thank you and we agree. We divided the long tables into several tables to make it more readable. In addition, we combined some categories of the "work hours per week (hour)" into 5 groups. Therefore, please note that we re-ran the analyses in response to this change and the results have changed since the last version. Please see extensive changes in Tables 1-4

- 4. Please find attached the revised manuscript for more detailed comments on the manuscript.
- (1) It's better not to start a sentence with figures, better to write in words.

Response: Thank you. We revised all these problems throughout the whole paper. Please see extensive changes in revised manuscript.

(2) One decimal place will be appropriate here. Authors should be consistent.

Response: We agree. Please see extensive changes in revised manuscript and tables.

(3) Strengths and limitations of this study: It is preferable to write this section as sentences rather than bullets.

Response: Thank you and apologies. We were informed by the journal that this part should contain up to five short bullet points, no longer than one sentence each. Therefore, we have to keep this part as some bullets. However, we also made some revisions in this part. Please see extensive changes on pp. 4.

It's important to add to this third bullet that findings are representative of doctors in China. Is this s strength or weakness?

Response: We agree. Our findings are only representative of doctors in China, and it is a weakness. We also added it as one limitation of this study. Please see the changes on pp. 4, and pp. 17, line 327-328.

Strengths and limitations of this study: The personal info should not be included in the first place, so this point is redundant. It should be deleted.

Response: We agree. It has been deleted. Please see the change on pp. 4.

(4) How? A sentence on how they dealt with job satisfaction issues will enrich this paragraph.

Response: Thank you. We added more detail on how these countries dealt with job satisfaction issues. Please see extensive changes on pp. 5, line 69-77.

(5) One study like this may not change the condition of doctors but it may contribute to enhancing the condition of doctors.

Response: Thank you. We revised this sentence on pp. 6, line 100.

(6) This sentence is too long.

Response: Thank you. We made some revisions to make it more clearly. Please see the changes on pp. 6, line 99-103.

(7) Authors should be more specific what they mean by 'random'. Was it simple random, systematic random sampling etc? Or was this convenience sampling?

What do the authors mean by "random"? Do they mean simple random sampling OR convenience sampling? This should be very explicit.

Response: "Random" means that we selected the hospitals and participated doctors at random to avoid selection bias. We used random number tables to realize the random process. And we think it is the simple random sampling. Please see extensive changes on pp. 2, line 32-33, and pp. 7, line 107-112.

(8) Reference added

Response: We added some necessary references in the revised manuscript. Please see the reference 32 on pp. 7, line 120.

(9) The grammar here need revision (Line 209).

Response: Apologies. We revised the grammar here and all through the manuscript. Please see the change on pp. 13, line 239, and the whole revised manuscript.

#Reviewer: 3

China".

**Reviewer Name: Segun Bello** 

Institution and Country: Segun Bello

This paper examined the job satisfaction among medical doctors in public hospitals in Shanghai, China using a cross-sectional survey method. Response rate was good. Findings may contribute important evidence for policy makers and employers.

1. Major highlights for revision

Instrument should be briefly described in the abstract.

Response: Thank you. We added some brief descriptions about instrument in the Abstract. Please see extensive changes on pp. 2, line 30-31, 36.

2. The use of the phrase 'working condition' in the title is misleading; suggest replace with 'factors' which appears more appropriate in this context. Working conditions may just one of the 'factors'. Response: Thank you and we agree. We revised the title as "A cross-sectional survey on job satisfaction and its associated factors among doctors in tertiary public hospitals in Shanghai,

3. Line 87 '...1000 doctors in 11 public hospitals were selected at random'; there was no description of how the sampling was done. For example, readers may desire to know out of how many and how the final respondents were reached.

Response: We added more sampling detail to describe the sampling process. Please see extensive changes on pp. 7, line 107-113.

4. Authors need to describe how variables were screened and finally selected into the model. As it is, it does not look organised. In the opinion of the reviewer, the patients' characteristic/composition included were too many and were probably highly correlated and may have resulted in type 1 statistical error.

Response: We added the selection detail of variables in the logistic regression model. Please see extensive changes on pp. 9, line 157-162.

We apologized that the collinearity test results were not included in the original submission files. We did multicollinearity analysis to testify the collinearity among variables. The results showed that collinearity did not exist, which means that it is reasonable to do logistic regression analysis with these variables. In addition, the stepwise selection regression method we used in the logistic regression analysis can also eliminate collinearity. Please see extensive changes on pp. 11-12, line 211-215, and Supplementary Table 1.

5. Conclusion and recommendations were not based on findings from the study. For example, line 293 mentions working hours, patients' respect and department as factors which did not even appear in the logistic regression model.

Response: Thank you and apologies. We revised the conclusion and recommendations according to the findings of this study. Please see extensive changes on pp. 17, line 331-336.

6. Line 134; what does 'totally reach the hospital requirement on their working...' mean? It is not clear; is it hospital target of number of patients treated? It needs to be specific.

Response: Apologies. Hospitals in China have some work requirements to evaluate doctors' work. The requirements can be reflected as the number of patients doctors diagnosed and treated every month. Different hospitals have different requirements. Participants should make their own evaluation according to their own hospitals. Please see the changes on pp. 10, line 172-174.

7. Some terms as used were unclear. Could the authors explain the meaning of 'considering work intensity' and 'bad social evaluation' in the methods?

Response: The work intensity was to reflect the quantum of doctors' work, which was mainly evaluated by the number of patients that doctors doing diagnoses, treatment, and surgery. Poor social evaluations reflected doctors' reputation among patients, which was mainly assessed by patients. Please see extensive changes on pp. 8, line 139-143.

8. Minor Line 23/24 (abstract) could be amended to read 'Doctors in public hospitals of China face considerable pressure which are likely to predispose to job dissatisfaction...'

Response: Thank you. We revised this sentence. Please see the change on pp. 2, line 24-25.

9. The paper would benefit from review of the grammar. There are too many grammatical errors all over the manuscript that would make it difficult for readers to comprehend. I give examples:

- Line 30, voluntary should be volunteered
- Line 56, Germany should be properly spelt
- Line 64, delete 'to'
- Line 70, replace 'a' with 'more than'
- Line 78, replace 'were' with 'are'
- Line 90, replace 'were voluntary' with 'volunteered' and 'can' with 'could'
- Line 106, replace 'multiple-choice' with 'structured'
- Line 113, delete 'completed'
- Line 114, replace 'observational' with 'dependent'
- Line 117, replace 'voluntary' with 'volunteering'
- Line 122, replace 'relations' with relationship
- Line 157, delete 'were'
- Line 183, insert 'who' to read 'doctors who did not expect patients.......'
- Line 186, replace '.....those without a clear feeling about this question' with those not satisfied with the type of patient
- Line 189, replace 'shared' with 'had'
- Line 193, insert 'by' to read '.....doctors' job satisfaction was influenced by their......'

Response: Thank you and apologies. We have revised all these grammatical errors, and polished up the language. Please see the revised manuscript.

## **VERSION 2 - REVIEW**

REVIEWER	Peng Xie
	Chongqing Medical University, China
REVIEW RETURNED	06-Oct-2018

GENERAL COMMENTS	Abstract
	As described in the Methods, it seems the questionnaire was
	designed based on the instrument used in 5th National Health
	Service General Research, and this instrument was based on the
	Minnesota Satisfaction Questionnaire. Is this correct? If so, the sentence need revision "Participants: The questionnaire was designed based on the 5th National Health Service General Research and the Minnesota Satisfaction Questionnaire.".
	Strengths and limitations of this study:
	For the Strength "We tried to improve doctors' job satisfaction and
	promote becoming a doctor in China.", it is not proper for this
	cross-sectional study. It is more proper for intervention researches.

Income (or income-workload balance) and other information may be important factors for job satisfaction and should be mentioned in this part as a major limitation.

## Background

The authors emphasized the heavy workload in China. However, income-workload unbalance may be more important for this topic. As numerous researchers have found it is also an important factor for job satisfaction.

The authors said "Therefore, the main purpose of this study was to promote the development of more doctors in China and to enhance the condition of doctors.", it is not proper for this cross-sectional study, too.

## Methods

The criteria for classifying job satisfaction and dissatisfaction should be specified in detail.

"We employed the stepwise selection method, with inclusion criteria of 0.10 and exclusion criteria of 0.15." Why the authors used this criteria? And this criteria is in conflict with the criteria "p < 0.05 were considered significant."

"Logistic Regression Analysis of Job Satisfaction and its Influencing Factors", Binary logistic regression or multiple logistic regression? Which method was used.

#### Results

"Characteristics, Working Condition, and Job Satisfaction", "Most doctors" should be replaced by specific values.

REVIEWER	Oluwaseun Akinyemi
	Senior Lecturer, Department of Health Policy and Management,
	College of Medicine, University of Ibadan, Ibadan, Nigeria
REVIEW RETURNED	15-Oct-2018

GENERAL COMMENTS	The reviewer provided a marked copy with additional comments.
	Please contact the publisher for full details

## **VERSION 2 – AUTHOR RESPONSE**

#Reviewer: 1

Reviewer Name: Peng Xie

Institution and Country: Chongqing Medical University, China

# 1. Abstract

As described in the Methods, it seems the questionnaire was designed based on the instrument used in 5th National Health Service General Research, and this instrument was based on the Minnesota Satisfaction Questionnaire. Is this correct? If so, the sentence need revision "Participants: The questionnaire was designed based on the 5th National Health Service General Research and the Minnesota Satisfaction Questionnaire."

Response: Thank you and we agree. We have corrected this sentence as "The questionnaire was designed based on the 5th National Health Service General Research, which was based on the Minnesota Satisfaction Questionnaire" in the Abstract, Participants on pp. 2, line 30-32.

2. Strengths and limitations of this study:

For the Strength "We tried to improve doctors' job satisfaction and promote becoming a doctor in China.", it is not proper for this cross-sectional study. It is more proper for intervention researches.

Response: Thank you. This cross-sectional study aimed to provide some suggestions or directions to improve doctors' job satisfaction and promote becoming a doctor in China. We revised this point of strength as "We tried to suggest ways to improve doctors' job satisfaction and promote becoming a doctor in China". Please see the change on pp. 4, line 52.

## 3. Strengths and limitations of this study:

Income (or income-workload balance) and other information may be important factors for job satisfaction and should be mentioned in this part as a major limitation.

Response: We agree. We have added this as a limitation. Please see extensive changes on pp. 4, line 59-60.

### 4. Background

The authors emphasized the heavy workload in China. However, income-workload unbalance may be more important for this topic. As numerous researchers have found it is also an important factor for job satisfaction.

Response: Thank you and we agree. Numerous studies from different countries also indicated that income and income-workload balance are related to doctors' job satisfaction, which has been stated in the Background on pp. 5, line 69-70. However, the income or income-workload balance was not explored in this study, which was a major limitation. We have added this limitation in "Strengths and limitations of this study" on pp. 4, line 59-60, and it can also be found on pp. 17, limitations.

## 5. Background

The authors said "Therefore, the main purpose of this study was to promote the development of more doctors in China and to enhance the condition of doctors.", it is not proper for this cross-sectional study, too.

Response: Thank you and apologies. The aim of this study was to suggest ways or directions to improve he conditions of such two concerns. We have revised the statement of this sentence on pp. 6, line 102-103.

#### 6. Methods

The criteria for classifying job satisfaction and dissatisfaction should be specified in detail.

Response: Thank you. Because job satisfaction and dissatisfaction were evaluated from multiple aspects, doctors had to make an evaluation of their job based on their work time, life stress, work stress, and the sources of work stress. Based on the definition by Gothe et al., if the individual is happy with their job after considering all the above factors, they could evaluate their job as satisfactory; otherwise, they could evaluate it as dissatisfactory. Please see the change on pp. 9, line 150-155.

#### 7 Methods

"We employed the stepwise selection method, with inclusion criteria of 0.10 and exclusion criteria of 0.15." Why the authors used this criteria? And this criteria is in conflict with the criteria "p < 0.05 were considered significant."

Response: The criteria were used for stepwise selection in the logistic regression analysis, which aimed at selecting some independent variables into the logistic regression analysis. The inclusion criteria of 0.10 and exclusion criteria of 0.15 were aimed to consider more related variables. And if using the criteria "p< 0.05" in this process, it would be too strict to ignore some related factors. However, to test the relationship between these factors and the dependent variable, we still use "p< 0.05" as the statistical standard. The inclusion and exclusion criteria were not in conflict with the statistical standard. 8. Methods

"Logistic Regression Analysis of Job Satisfaction and its Influencing Factors", Binary logistic regression or multiple logistic regression? Which method was used.

Response: Thank you. It was the binary logistic regression analysis. We have added the description on pp. 9, line 165, and pp. 11, line 221.

## 9. Results

"Characteristics, Working Condition, and Job Satisfaction", "Most doctors" should be replaced by specific values.

Response: Thank you. We have replaced "most" by specific values. Please see extensive changes on pp. 10, line 181-182.

## #Reviewer: 2

Reviewer Name: Oluwaseun Akinyemi Institution and Country: Senior Lecturer, Department of Health Policy and Management, College of Medicine, University of Ibadan, Ibadan,

# Nigeria

1. Line 123: verified, validated?

Response: Thank you and we agree. We revised "verified" as "validated". Please see the change on pp. 7, line 126.

2. Line 130: doctorial, doctoral?

Response: Thank you and we agree. We revised "doctorial" as "doctoral". Please see the change on pp. 8, line 134.

3. Ethical Approval: Please add a statement on informed consent from participants Response: Thank you. We added this statement on pp. 9, line 158-159. It can also be found on pp. 7, line 116-117.

4. In all the tables, these headers should not be capital "N" but rather small "n" Response: Thank you. We have revised it in Table 1-3.

# **VERSION 3 - REVIEW**

REVIEWER	Peng Xie
	Chongqing Medical University, China
REVIEW RETURNED	23-Dec-2018

GENERAL COMMENTS	The reviewer completed the checklist but made no further
	comments.