Peer Review File

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Round 1

1) First of all, my major concern for this study is that the pooled data from the 56 published papers cannot answer the research question of the regional distribution of cutaneous sporotrichosis in China, as well as the characteristics of cases with cutaneous sporotrichosis, because the sample from published studies consisted of samples collected in different years and different regions, not from a national representative sample. Because of this, the authors need to reconsider the research question appropriate for the current data, or write it as a literature review/systematic review. The below are my general comments for this study.

Reply 1): Thanks for your valuable advice and we have modified our text as advised.

Change in the text: Line 3-4

2) Second, the title did not indicate the research methodology of this study.

Reply 2): Thanks for your valuable advice and we have modified our text as advised.

Change in the text: Line 3-4

3) Third, the abstract did not describe the knowledge gap on the regional difference of cutaneous sporotrichosis in China in the background, did not describe how the data were obtained and analyzed in the method, did not quantify the results by using detailed figures and P values and did not describe the results of literature search in the results, and the conclusion has no detailed comments for the public health implications of these findings.

Reply 3): Thank you for the detailed review. We have made some changes in the Abstract.

Change in the text: Line 26-48

4) Fourth, the introduction of the main text did not explain why the literature-based data can answer the research question of the regional distribution of cutaneous sporotrichosis in China.

Reply 4): Thanks for your constructive comments. Corresponding details have been added in the Introduction.

Change in the text: Line 84-87

5) Fifth, the methodology of the main text needs to define the inclusion of related studies according to the PICOS principles, assess the methodology quality of the included studies, and described how the dataset was established, which variables were extracted, and how the data were analyzed.

Reply 5): Thanks for your valuable suggestions. Some changes have been made and corresponding details have been added regarding the methodology.

Change in the text: Line 104-125

Round 2

Reviewer A

The authors did not address my major concern that the pooled data based on the published papers cannot answer the research question of the regional distribution and clinical characteristics of the cutaneous sporotrichosis in China, which can only be answered by an empirical nationwide study. The current analysis based on data extracted from published papers is only a secondary data analysis. In fact, the authors cannot analyze the data in the current way, which were from different years and different regions and the sample representativeness of included studies is also problematic.

Reply: Our study has conducted a pooled analysis of the published papers on the incidence of sporotrichosis in China, which largely reflects the incidence and treatment of sporotrichosis in China. However, as you have pointed out, our findings need to be validated by more specific incidence data.

The authors describe this study as a literature review but in the main text, the reported this paper according to the PRISMA, which is a reporting guideline for systematic reviews, not literature reviews. For the literature review, the authors can review the findings from these retrieved studies one by one or summarize their findings, not to pool the data to form a new dataset and reanalyze the new data again.

Reply: Thank you for your suggestion, and we agree with your view. We have revised it in the manuscript (Lines3-4)

Reviewer B

- 1. All location nouns should be lowercase. Please check your whole manuscript and revise.
- 24 **Background:** Cutaneous sporotrichosis is prevalent worldwide and a common subcutaneous
- 25 fungal disease in Northeast China. The incidence of cutaneous sporotrichosis in southern China
- 95 we searched published reports on the incidence of cutaneous sporotrichosis in China and
- analyzed the differences in the disease between North and South China to provide a valuable

Reply: Thank you for your suggestion, and we agree with your view. We have revised it in the manuscript.

2. It's needed to unify all "north and the south" and "northern and southern" in your whole manuscript.

Reply: Thank you for your suggestion, and we agree with your view. We have revised it in the manuscript.

3. Please check whether the citation of references in the below 2 sentences are correct. The

author' name and publication years don't match with your reference 68 and 69.

- was then isolated. In China, Diao Xinde (68) discovered the disease for the first time in 1916,
- but the fungus was not cultivated. The disease mainly invades the skin (i.e., cutaneous
- degree of endemicity. As of 2016, the data in the epidemiological literature of 8 fungal
- 261 infections in China show that the most prevalent areas of sporotrichosis are Brazil, China, and
- 262 South Africa (69). Our study shows that sporotrichosis has been reported in 16

Reply: Thank you for your suggestion, and we confirm they are correct.

4. Please check if the citations of references need to be added in the below sentence since you mentioned the previous "studies".

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91 Although differences in populations subject to sporotrichosis, cause of infection, and
92 pathological mechanisms of this disease have been demonstrated in previous studies, the
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Reply: Thank you for your suggestion, and we agree with your view. We have revised it in the manuscript.

4. Table 2:

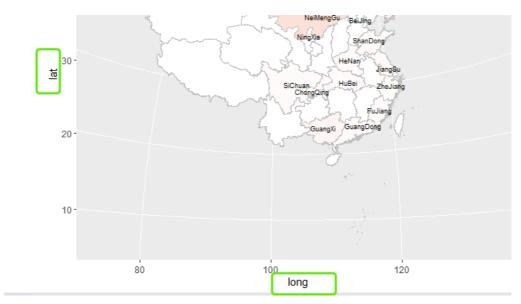
The data below in your main text is inconsistent with your Table 2. Please check.

- young adults (64.3%). The occupations of patients were mainly farmers (76.9%) and workers
- 180 (8.3%). The proportion of farmers in the south was lower than that in the north, while the
- 181 proportion of workers was the opposite. The course of the disease was mainly concentrated in
- 182 2 to 6 months. There were significant differences in the age of onset, occupation, and disease
- course of sporotrichosis patients in the northern and southern regions (P<0.05; Table 2).

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Student←	710 <u>(6.2%)</u>	638 (6.0%)	72 (7.9%)←
Farmer =	8852 (76.8%)	8277 (78.1%)	575 (62.8%)
Worker←	960 (8.3%)	827 (7.8%)←	133 (14.5%)
Staff and officials←	326 (2.8%)←	302 (2.8%)←	24 (2.6%)

Reply: Thank you for your suggestion, and we agree with your view. We have revised it in the manuscript.

- 5. Figure 2:
- 1) Please revise "my country" to "our country".
- 550 Figure 2 Distribution area of sporotrichosis case reports in my country, Note: Only the
- provinces/municipalities where reports of Sporothrix appeared are marked in the figure.
- 2) Please check whether the description of x/y-axis is correct. It would be better to indicate the full name.



Reply: Thank you for your suggestion, and we agree with your view. We have revised it in the manuscript.