

Peer Review File

Article Information: <https://dx.doi.org/10.21037/apm-21-2824>

Reviewer A

Song and colleagues did a descriptive analysis to look into the prevalence characteristics and survival time of pneumoconiosis cases in Jiangsu Province in China. Their conclusion support the results; stage II and stage III pneumoconiosis subjects have poor survival compared to stage I.

The study needs a comprehensive editing for English and grammar.

Reply:

Thanks for your kindly suggestion. Although we have made an English proofreading, some grammatical errors or unprofessional expressions may exist in this article. A comprehensive language edited version of this manuscript which commissioned by a professional English proofreading agency was resubmitted in APM submission system.

Changes in the text:

We have revised a lot of details such as “80% cases” corrected to “80% of cases” in line 35, “has displayed a dramatic increase” change to “significantly increased” in line 72, etc. All the language revised portion were marked in red track in the manuscript.

Reviewer B

In this manuscript, the authors investigated the nature of the patients with pneumoconiosis in China. This manuscript is well-written and contains important information about the risk of progression of the diseases and death in pneumoconiosis. However, I think that this paper has several problems as indicated below.

Major points

In Table 2, the authors showed stage 3 was correlated with shorter dust exposure time and shorter survival time. Survival time among the stages was well investigated in this article. However, the relationship between stages and exposure time was not shown. I would recommend the authors to investigate is in more detail.

In Table 5, multivariate cox hazard model was performed. This analysis included the economic level of the participants. I have several questions about this. At first, how

the authors acquired this information. Second, what was the definition of high level, medium level, and low level of economics. Third, how this economic level affected the prognosis of the pneumoconiosis.

In Table 5, upgrade of stages of pneumoconiosis was shown to be correlated with the prognosis of pneumoconiosis. I want to know how often those upgrades occurred in this cohort.

Minor point

Page 4, line 165: “contrastto” should be “contrast to”.

Comment 1: In Table 2, the authors showed stage 3 was correlated with shorter dust exposure time and shorter survival time. Survival time among the stages was well investigated in this article. However, the relationship between stages and exposure time was not shown. I would recommend the authors to investigate is in more detail.

Reply 1: Dust exposure time of three stages were 16.24 ± 9.89 、 17.05 ± 9.88 、 15.02 ± 9.48 respectively, first diagnosed in stage III was correlated with shorter dust exposure time. The proportion of silicosis in each stage may be the key reason for this difference. There were 66.36% (8178/12322) silicosis patients in stage I, 75.44% (1800/2386) in stage II, 81.70% (567/694) in stage III. Silicosis is generally known as the most common, fastest progressing and most harmful type of pneumoconiosis, silicosis progresses to stage III was short than other types. Although their dust exposure time was not long, a proportion of silicon dust exposed workers were directly classified as stage III pneumoconiosis in the first diagnosis. There were a highest proportion of silicosis in stage III in this study, the dust exposure time of stage III may short than other two stages.

Changes in the text: We have added a description of the relationship between dust exposure time and pneumoconiosis stages in “4. Discussion” (line 261-269).

Comment 2: In Table 5, multivariate cox hazard model was performed. This analysis included the economic level of the participants. I have several questions about this. At first, how the authors acquired this information. Second, what was the definition of high level, medium level, and low level of economics. Third, how this economic level affected the prognosis of the pneumoconiosis.

Reply 2: A total of 13 prefecture-level cities were divided in Jiangsu Province. We divide the economic level according to the GDP data of each city which published in Jiangsu Provincial Bureau of Statistics. The top 1/3 of GDP were considered to be high economical level, the last 1/3 were classified as low economic level, and the rest were classified as medium economic level. The survival and progression of pneumoconiosis is indeed affected by many factors. However, the economic level is one of the important factors for the prognosis of pneumoconiosis patients. The economic level will affect the preventive measures against dust in the region, the regulations and policies adopted for dust enterprises, the medical expenses of pneumoconiosis patients, nursing

expenses, nutrition expenses, and wages for lost work. etc., which will indirectly affect the diagnosis and treatment of patients with pneumoconiosis.

Changes in the text: We have added an explanation of economic impacts on prognosis of pneumoconiosis in “4. Discussion” (line 311-315).

Comment 3: In Table 5, upgrade of stages of pneumoconiosis was shown to be correlated with the prognosis of pneumoconiosis. I want to know how often those upgrades occurred in this cohort.

Reply 3: Most of the patients 13847(89.90%) remain the first diagnosed stages and keep stable among all the 15402 pneumoconiosis, 1107(7.19%) upgrade from stage I to stage II, 232(1.51%) upgrade from stage II to stage III and 216(1.40%) upgrade from stage I to stage III in this study.

Of course, this proportion was not absolute, some participants may not be updated timely due to loss of follow-up.

Changes in the text: We have added a data about upgrade of stages of pneumoconiosis in “3.1. Demographic and occupational characteristics” (line 170-173).

Comment 4: Page 4, line 165: “contrastto” should be “contrast to”.

Reply 4: Thanks for your kind reminder, we have made a correction.

Changes in the text: “contrastto” change to “contrast to” (line 175).