

OPEN PEER REVIEW REPORT 1

Name of journal: Neural Regeneration Research

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Title: Jidong Cognitive Impairment Cohort Study: Objectives, Design and Baseline Characteristics

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Reviewer's country: Brazil

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COMMENTS TO AUTHORS

Authors performed Jidong cognitive impairment cohort study by participants recruited from Kailuan and Caofeidian community in Tangshan City, Hebei Province. Authors evaluated degree of participants' cognitive impairment using MMSE score and followed up their conditions using several methods. Authors, in this study, identified that age, drinking, passive smoking, blood pressure are main risk factors for transition from MCI to dementia and concluded that this study will be helpful to provide the comprehensive prevention and intervention of dementia in the future. The data are interesting; however, there are many parts of the text that need explanation.

Main concerns:

1. In discussion line 35, authors should discuss little more biomarkers or risk factors which are related to transition from MCI to AD dependent on the results of their cohort study. Authors just described the superficial results, therefore, it is necessary to deeper discuss them.
2. Authors should mention the reason why Kailuan and Caofeidian community in Tangshan City were selected for the cohort study. For example, is prevalence of AD higher than other areas in China or high PM2.5 (air pollution) environments because it is mentioned that Kailuan is one of large coal mining industry areas? This was deemed to insufficient in design and recruitment of subjects.
3. In table 4, authors just summarized the previous reports. However, the more detail explanation is needed to understand the significance of this paper. This concern was the weakest point in this study. Additionally, were there any disadvantages of this study compared with the previous reports?
4. How many subjects were removed from the cohort at the starting point and what were main reasons? Authors should describe detailedly them in study setting and population section
5. Were there any differences of risk factors between two regions, Kailuan and Caofeidian community? Author should mention the differences of baseline characteristics of participants, factor distribution and so forth because there were many different environments in Kailuan and Caofeidian which was mentioned in study setting and population using box-and whisker plots.