Author’s response to reviews

Title: Prevalence of and Factors associated with Sarcopenia among Multi-Ethnic Ambulatory Older Asians with Type 2 Diabetes Mellitus in a primary care setting

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Author’s response to reviews:

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Editor,

BMC Geriatrics

Dear Editor:

Re: Revision of Manuscript entitled “Prevalence of and Factors associated with Sarcopenia among Multi-Ethnic Ambulatory Older Asians with Type 2 Diabetes Mellitus in a primary care setting”

Thank you for the kind review of the manuscript. We have revised the manuscript based on the suggestions and advice by the reviewers.
Reviewer’s comments from Dr Ding-Cheng Chan (Reviewer 1):

1.1 Most concerns were addressed. Some minor points. Since total skeletal muscle mass index, not appendicular skeletal muscle index, I will suggest the authors to include all the cutpoint numbers (muscle mass, strength, walking speed) in the method section, not just according to the AWGS guideline.

Thank you for the comment. We have revised the methods section accordingly on P8 line 118-121 to include the cut-off numbers of all three parameters.

1.2 The explanation of light house work and worked for pay/volunteer are not satisfactory. Those who can do light house work or worked for pay/volunteer were in general in better health condition compared to those who cannot. Therefore, It is really hard to understand why those more active/healthier people are more likely to have sarcopenia. Please provide better reasoning.

We apologise for the confusion. It appears contradictory that those who “can do” light housework are more likely to have sarcopenia. However, the Physical Activity Scale for the Elderly (PASE) in the questionnaire asked participants “During the past 7 days, have you done any light housework, such as dusting or washing dishes?”, instead of whether they “can do light housework”. The completion of a task has different connotation from the ability to perform the task. In the context of the above question, a person has the ability to perform the housework but might not have done the task (for example, they are not required to carry out this role). As in any questionnaire, the limitation is in the context. Thus the questionnaire provides a snapshot of their task performance and an estimate of their physical activity. We have to recognise the limitation of looking at one specific question within a questionnaire. The PASE scale is usually taking as an aggregate score to approximate the physical activity status of the respondent.

Our interpretation of the association between “work for pay or volunteer” and sarcopenia follows the same rationale. A person who works as a taxi driver or a cashier is literally working but the work nature can be largely sedentary, which may indirectly affect their muscle status.

After the logistic regression analysis, the physical activity and work status are not significant factors associated with sarcopenia.

Ellen Freiberger (Reviewer 2):

2.1 The authors are to congratulate for their well-improved manuscript. They have addressed most major components of the reviewer. Nevertheless, some comments remain and should be addressed before the manuscript can be considered for publication:

Background:
P 4 line 19-21 nutrition and physical activity are placed under environmental condition. This is confusing as both are lifestyle behavior factors. Furthermore, on p 7 line 90-91 PA is placed under lifestyle behavior. Please correct.

We apologize for the confusion. We have corrected the P4 line 19-21 as per reviewer’s suggestion.

2.2 Please provide information if the 6 meter gait speed test had a run-in or a run-out phase. This is important to rate the meaning of the measured gait speed as in gait research it is of common knowledge that the overall gait speed changes significantly related to the protocol.

Thank you for the comment. In our study, there is a run-in phase of approximately one metre before the “start” point as well as a run-out phase of approximately one meter after the “stop” point. The time taken to walk the 6 meters in between the “start” and “stop” points was recorded to calculate the 6-meter gait speed. We have added this detail in the revised manuscript on P8 line 113-115.