Reviewer's report

Title: Comparison of hemodynamic and nutritional parameters between older persons practitioner of physical activity nonsmokers and ex-smokers: a prospective study.

Version: 2 Date: 8 February 2010

Reviewer: Hui-Chuan Hsu

Reviewer's report:

This study used a retrospective design to see the exercise program effect to the non-smokers and ex-smokers, and four evaluations of the health parameters were conducted during a year. An intervention design and prospective study needs a lot of effort to input, and the data would be very valuable. However, the statistics used in this study was not appropriately conducted to analyze the findings. Some comments and suggestions are as follows, and I hope this would be helpful for the authors.

Major Compulsory Revisions

1. The characteristics of the two groups at the beginning were not the same (at least HR was significantly different), and the gender composition of two groups are not the same. It is difficult to tell if the difference was from the smoking status or from other differences at the baseline. It would be better if the authors may control for other variables by statistics when comparing the two groups, such as multi-variate regression.

2. The authors only compared the two groups at the same stage, but did not compare the change across time within a group. The effect of exercise program should be determined first, then the difference between two groups are compared. The exercise program may bring different effect for two groups. The exercise effect is possibly more significant of HR in the nonsmokers than in the ex-smokers; SBP may be reduced more in ex-smokers than non-smokers. However, the change within a group was not shown by the statistics used in this manuscript. In addition, the change during four evaluations in a year may be related to the aging effect or related to the exercise cumulative effect, but it is impossible to tell without the control group in the study design. I also suggest this can be added in the limitation.

Minor Essential Revisions

3. In Table 1, all the comma (,) should be replaced by dot (.).

Discretionary Revisions

4. In this study, only the samples who finished the exercise program for 12 months and four evaluations were included. There were no control groups to contrast the effect of participation to this program, and probably those dropped up of the
program were more likely to be frail, which may cause some bias of the results. I suggest the authors should add this limitation and discuss the possible biased direction of the results in the Discussion section.

5. Four evaluations of the indicators were conducted. I'm not sure if the initial evaluation was before the exercise program, or it was conducted after the program. This baseline data would be the basic difference between two groups. Please add details about the evaluation time.

6. Discussion of the results should be revised if further statistics is conducted.

**Level of interest:** An article of limited interest

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have not competing interest.