Reviewer’s report

Title: The Effect of Exercise on Prescription on physical activity and wellbeing in a multi-ethnic female population: A controlled trial

Version: 2 Date: 9 April 2012

Reviewer: Anne Vuillemin

Reviewer’s report:

The topic of this paper is of major interest. The studies involving a multi-ethnic population are scarce and few studies were interested to study the effect of exercise on prescription in a population. However, the organization of the paper is surprising, with the results coming just after the background and the methods at the end of the paper. Moreover, there is no pagination in the document.

MAJOR COMPULSORY REVISIONS

INTRODUCTION

The writing of the introduction is good, with a clear development and presentation of the topic.

The question posed by the authors is well defined in the introduction but it not clear how women were defined as sedentary. This point is of major importance because it is a criterion to be involved in the study? Even if the assessment of physical activity is described, the definition of sedentary is not precised.

METHODS

The authors mentioned they decided to use the natural flow of patients to involved the women in the study but it is not clear how was done the allocation in the groups, which may have influenced the results.

INTERVENTION

As emphasized in the limitations of the study, the intervention seems not adapted for this population. Then, the results may be not surprising?

DATA COLLECTION

The primary outcome measure was physical activity. The presentation of the instrument use to assess physical activity is not clear, in particular the separate questions and then the different scores calculated and their measurement units.

The compendium of physical activities has been updated in 2011 (Ainsworth et al. MSSE 2011).

Secondary outcomes measures are subjective and objective health? If so, it is suggested that perceived health and well-being are outcome used to express subjective health and use of care to express objective health?

In which language was validated and administered the W-BQ12?

The question on the use of care can’t be used alone, how the responses were
interpreted? For what purpose this information is used? Responses must be adjusted for other variables.

DATA ANALYSIS

Data analysis paragraph: Gaussian instead of Guassian

It is known that physical activity decreases with age. The population involved women aged 18 to 65 years. No interactions were tested with age?

RESULTS

Figure 1 presented LTPA. Why? What about other domains? This figure is not very useful and readable.

How many women were randomized and how many women were involved from natural flow of patients? 190 women in the EoP group in the text, but 189 in table 1. A flow chart in the method paragraph is necessary to better understand the sampling procedure.

The characteristics of the EoP and control groups differed on the different variables. The authors indicated that corrections were made for age, BMI ethnicity and mental well-being, but why only these variables?

DISCUSSION

The limits of the study are presented. The discussion of the results is short and the interpretation depends on some elements not precised in the methods paragraph (sedentary, corrections made for some variables...).

Level of interest: An article of importance in its field

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 no competing interests