Reviewer's report

Title: Adherence to treatment to help quit smoking: effects of task performance and coping with withdrawal symptoms

Version: 2
Date: 15 April 2014

Reviewer: Francesco Pistelli

Reviewer's report:

General comment
This study aims to identify variables that may predict the duration of continuous abstinence from tobacco smoking in a group of smoking University workers (n = 125) who underwent to a smoking cessation program based on cognitive-behavioral and pharmacological therapy.

The authors conclude that “coping with withdrawal symptoms”, “performance of treatment tasks”, “use of alcohol and/or tranquilizers” are variables significantly related to abstinence from smoking.

This study explores a repeated research aim. The novelty is the focus on the compliance of the participants to the proposed smoking cessation program. This reviewer has major methodological concerns.

Major Compulsory Revisions
1. It is not clear how the study subjects were enrolled in the smoking cessation program. Did they ask for participating in the program (for example, answering to newspaper advertisements) or were individually offered to participate in? The selection of the participants may have affected their motivation to quit smoking.

2. The authors should explain why if “concurrent dependence on other substances” was an exclusion criterion (page 5, line 6 from the bottom), then they analyze the variable “other drug addiction” and conclude that “use of alcohol and/or tranquilizers) influences abstinence negatively”. Further, within the Methods section it is not defined “dependence” or “consumption” of alcohol.

3. The smoking cessation program was not standardized. The authors take into account some variables, such as number of days to achieve abstinence and number of treatment sessions. Other variables, for example if the program was conducted by the same or different physicians or psychologists, or if it was an individual or group program, are not considered. Further, it is not specified how was established the “quit day” within the program (from which presumably the duration of continuous abstinence was calculated). This should be clarified and discussed as limit of a study which was conducted in the real life of a clinical intervention.

4. There is no mention about the variable of compliance to the pharmacological therapy; it is not specified how many study subjects were treated with the pharmacological therapy. This is a critical point that may have affected main
results of the study, for example, with regard to the score obtained on the “Coping with withdrawal symptoms interview”.

5. The main conclusions are based on the results from the analyses on the variables “Performance of treatment tasks” and “Coping with withdrawal symptoms interview”. The first is not explained or coded in the Methods section. The latter is a not-validated instrument, specifically designed for the present study, and no other validated instruments to assess withdrawal symptoms were used as comparison.

6. The variables “physical exercise” and “motivation change” are not explained or coded in the Methods section.

7. The variables about the number of previous attempts to quit smoking or living with other smokers (reported in the literature as significant variables affecting smoking cessation) are not considered.

8. Major conclusions should be the same both in the abstract and in the text of the paper.

9. Language should be improved (see for example: page 4, lines 3-5 from the top; page 4, lines 11-16 from the top).

Minor Essential Revisions

10. Abstract, background, “pre-intervention variables”. It should be noted that also “intervention variable” were analyzed in the study (for example, number of treatment sessions).

11. The results reported in the abstract should be quantified.

12. Introduction section might be shortened, in particular in the first paragraph.

13. Add “s” to the title of the Methods section.

14. Page 5, lines 9-10 from the top, “The probability of continued abstinence at 12 months was 76%”. Clarify this result reported in the Methods section.

15. The variable “years of addiction to cigarettes” should be more appropriately named “years of smoking”, as the year of diagnosis of dependence from tobacco smoking it is probably unknown in the single study subject.

16. Nicotine content should be expressed in mg per cigarette (not in “mg/pack”)

17. Table 2. Correct “anos” in “years”.

18. Table 3. Correct “sesiòn” and “syndrome” in “sessions” and “symptoms”, respectively.

Discretionary Revisions

19. Table 5 and table 6 might be joined.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Not suitable for publication unless extensively edited
Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests