Author’s response to reviews

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

Authors:

FRANCISCA LT LOPEZ-TORRECILLAS PhD (fcalopez@ugr.es)
M. MAR R RUEDA PhD (mrueda@ugr.es)
EVA MARIA LQ LOPEZ-QUIRANTES MASTER (emlopezg@gmail.com)
JAVIER MS MACHADO-SANTIAGO PhD (jmachado@ugr.es)
REYES RT RODRIGUEZ-TAPIoles PhD (rodrigueztapioles@ugr.es)

Version: 5  Date: 30 August 2014

Author’s response to reviews: see over
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**EMBASE:** Adherence to treatment to help quitting smoking: effects of task performance and coping with withdrawal symptoms.

Authors:
Francisca López –Torrecillas (fcalopez@ugr.es)
Mª Mar Rueda (mrueba@ugr.es)
Eva María López-Quirantes (emlopezq@gmail.com)
Javier Machado Santiago (imachado@ugr.es)
Reyes Rodríguez Tapioles (rodrigueztapioles@ugr.es)

Author's response to reviews: see over
Review of the paper

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

The present paper analyze a relevant topic in the treatment of smoking because one of the problems in the treatment of smokers is the low adherence at the treatment in part of the smokers, not finalizing the treatment and not obtain the abstinence.

In the present paper they are several questions that need to clarify as indicated below. In the abstract they are several errors. The participants as indicated as 125 but then it is indicate that only are 50 men and 44 women, a total of 94 participants.

The abstract and the number of participants have been changed as the reviewer indicates.

It’s necessary clarify the real number of smokers and treatment-related variables utilized in the study. It’s relevant include more information in the abstracts about the method, because the conclusions not it related with the previous information include in the abstract.

We have noticed that in other sections of the article the number of participants was correct and we have made the changes proposed by the reviewer.

In the background it’s necessary to clarify "currently the combined cognitive-behavioral and pharmacological treatment is the best option to quit smoking [3-5]". The references not indicated this assert and the authors probably are refering at the "behavioral support" necessary in the pharmacological treatment because without the behavioral support the results of pharmacological treatment for smoking is low. Actually, the results indicate that the behavioral treatment have efficacy by only it, as the pharmacological treatment with behavioral support, but the combination of cognitive-behavioral treatment and pharmacological treatment non indicated that is superior at only the cognitive-behavioral treatment (ex, see Fiore et al., 2008).

We believe that our study does not analyze the effectiveness of quitting smoking programs. We agree that the behavioral treatment have efficacy by itself. Nevertheless, in the text [6-8], we have added reference to the pharmacological treatment with behavioral support.

Is confusing the assert of "... from 50.7% to 55.0%", and "... in the long term is smaller than 5%". I consider that this a confusing is by comparing results in abstinence of smokers in treatment with abstinence of smokers self-quitters in the general population.

We have replaced paragraph "... Although success rates remain modest, during 2005-2012, the percentage of ever smokers who quit increased significantly, from 50.7% to 55.0% However, the proportion of those who succeed in the long term is smaller than 5%. [6, 7] by: The survey in the general population shows that about 70% of smokers would like to quit and about 30-40% try to quit. We have to take into account that only the 5% succeeded in quitting, to support this data we have added a reference [11].
The objective of the study was "to determine with pre-intervention variables significantly predict abstinence from smoking and to what extent these can prolong abstinence". Clarify and justify the objective of the study in the text and indicate with explicity the related variables.

The objective of the study has been clarified as the reviewer indicates.

In the method section clarify the assert "... varenicline. The probability of continued abstinence at 12 month was 76%". Probably this is a error. The probability of continued abstinence in more low at 12-month follow-up.

We have clarified this in the method section and we have included as obtained the punctual vs. continuous abstinence and we have indicated it in the results section.

Justify if the size of the sample is good to the statistical analysis realized.

The sample size has been determined by the number of participants of the program to quit smoking. This sample size become a maximum allowable difference between the probabilities of abstinence versus relapse smoking estimates, and the true values of 0.0876 (worst case p=0.05) with 95% confidence. The Kaplan-Meier method can be used for this sample size. In the literature of applications of survival, Kaplan Meier methodology and Cox regression models have been used with sample sizes which are similar to the ones of our studio or even lower [see A, B].


In the statistical analysis section it is necessary indicate as obtain the puntual vs. continuous abstinence and indicate in the results section the puntual vs. continuous abstinence . It is necessary follow the criteria of SRNT or other similar criteria about as consider puntual vs. continuous abstinence.

Change made as indicated by the reviewer

In the results change p=.0000 by p=.0001.

Change made as indicated by the reviewer

In the results not appear the puntual vs. continuous abstinence. This results it is necessary in the paper.

Change made as indicated by the reviewer

Justify the statistic analysis utilized and not other.

We have used these statistical analyzes and not others because there are previous examples in the literature about the use of survival analysis [C,D]. We have used the Kaplan- Meier methodology because is the most common approach used to survival analysis in medicine [E]. The Kaplan-Meier method has many advantages in comparison with the actuarial methods, particularly if the sample size is small [E].
The Kaplan-Meier approach has been made even more powerful by the development of statistical models that enable dichotomous outcomes to be used as dependent variables in multiple logistic regression analyses. These methods are called proportional hazard models or Cox models. Besides, their application is increasing among in medical studies [E]. Following your suggestion, we have written more details about the type of analysis used, and its justification with some important references related to application of this analysis in studios.


As indicated in the discussion a question related to the discrepancies obtained is explained by the heterogeneous group. Clarify this question and indicate if this heterogenous can influence the results.

Regarding the heterogeneous group (in the discussion section), note that we had alluded to its socio-demographic characteristics (for example, all that were employed presented a high level of motivation).

In the discussion section appear new variables (ex., exercise) not indicated previously in the study. They need to appear in results. No is a good idea include new results in the discussion. They need appear in the results section and related with the study.

This variable is present in all sections of the study (Background, Methods, Results, etc.).

The study need clarify if the medication is free or have cost for the participants and indicate if in the country where is realized the study is or not free of cost to smokers.

We have made the changes proposed by the reviewer and we have clarified that the medication is free.

Clarify in the tables the relapse (%) in table 1. It is confusing.

We have modified all tables the relapse (%).
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.

The Exclusion criteria were concurrent depending on other substances (cocaine, heroin, alcohol, etc.). The moderate use of alcohol and / or use of tranquilizers by medical prescription were not included in the exclusion criteria.

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.

We have now included this sentence in the methods section as the reviewer indicates.

3. The article was included a section authors’ contributions:

Francisca López Torrecillas (FLT), Javier Machado Santiago (JMS) and Reyes Rodríguez Tapioles (RRT) conceived the original idea for the study, obtained funding and wrote the study protocol. FLT, JMS, RRT and Eva María López-Quirantes (EMLQ) manages the day to day running of the study, including all participant follow-up. Mª Mar Rueda (MMR) will undertake all data analyses. This study paper was written by FLT and MMR with input from all co-authors. FLT is guarantor for this paper. All authors read and approved the final manuscript.
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”.

Variable compliance to the pharmacological therapy is analyzed and inserted into the table

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.

We have clarified the coding variables in the Methods section: Coping with Withdrawal Symptoms Interview (CWSI). This instrument was designed specifically for this research. The smoker is asked about (1) craving in the past month, (2) coping with craving, (3) presence of anxiety, (4) depression, (5) sleeping problems, (6) eating problems (excess appetite), (7) physical problems like stomach aches as a result of drug therapy, or other physical problems, (8) if he/she has done physical exercise and/or sport in order to cope with withdrawal symptoms, and (9) if he/she perceived any benefits after quitting smoking. Each item has 4 response alternatives, on a 4-point Likert scale from (1) never to (4) repeatedly. For computer exercise taking into account the criteria of the International Physical Activity Questionnaire (IPAQ) [35,36] whose values range from high to low to moderate and inactive. Items 8 and 9 were reverse-scored.

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

Participants are classified into three coping groups: lack of coping and recognition of the problem, i.e. ineffective coping (score<4), moderate coping (score 6 to 12) and effective coping (score 13 to 17). Smoking Processes of Change Scale (SPC) [32, 33]. This questionnaire measures 10 motivation of change. Participants indicate the frequency with which they have engaged in or experienced 40 activities or events within the last month on a 5-point Likert scale from (1) never to (5) repeatedly. This instrument has good psychometric properties. In this research we used the Spanish version of the instrument [34].

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.

In the Background we have indicated that finding that having attempted to quit smoking in the past predicted abstinence during the first week and sustained abstinence during 6 months in a second attempt to quit [15].

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

We made changes proposed in the conclusions, 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).
We have revised the language.

**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).

We have clarified the information related to the variables under analysis. Socio-demographic variables, related to cigarette smoking and to treatment.

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

The abstract has been changed as the reviewer indicates.

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

The first paragraph in the Introduction has been improved as the reviewer indicates.

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

We have added “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

We have clarified the 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.

We have made the changes proposed as the reviewer indicates

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

We have made the changes proposed as the reviewer indicates. Sorry, it was an error in transcription. The content is taken from a table that effectively expressed in mg per cigarette of Elisardo Becoña smoking cessation program in: http://www.dipgra.es/documentos/programa_dejardefumar.pdf.

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

We have made the changes proposed as the reviewer indicates

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

We have made the changes proposed as the reviewer indicates
Discretionary Revisions

19. Table 5 and table 6 might be joined.

We have made the changes proposed as the reviewer indicates

**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
Reviewer's report

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

Version: 2 Date: 17 April 2014

Reviewer: Elisardo Becona Becoña

Reviewer's report:

see attach

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

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

ok