Reviewer's report

Title: A Pilot Study on Mindfulness Based Smoking Cessation

Version: 1 Date: 17 October 2006

Reviewer: Eric Westman

Reviewer's report:

General
This manuscript describes an uncontrolled, pilot study of a Mindfulness Based Smoking Cessation (MBSC) program consisting of eight weekly group sessions, daily meditation practice of 45 minutes per day, and instruction in applying mindfulness to drug urges and triggers of drug use behavior. Eighteen participants were enrolled; 13 completed the 8 week intervention. Carbon monoxide confirmed abstinence at 6-weeks was 56%. The authors conclude that the MBSC shows promise as a smoking cessation intervention. The limitations of such a pilot study are clearly stated.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Abstinence in tobacco dependence studies is typically expressed as “continuous” (no smoking since the target quit day) or “point-prevalence” (no smoking for a certain number of days prior to the measurement). Please describe how you measured abstinence using these terms. (See West R, Hajek P, Stead L, Stapleton J. Outcome criteria in smoking cessation trials: proposal for a common standard. Addiction 2005;100:299-303.)

If the last measurement of abstinence was at the “end of treatment,” then specifically state this. If any time elapse after the end of treatment and the final measurement of smoking status, then specifically state this.

The lack of statistics in this manuscript is unusual for smoking cessation studies:
Section 3.7: “Due to the small sample size, a descriptive portrayal of results (rather than tests of statistical significance) was used…”

Why not at least calculate the 95% confidence limits for the abstinence rate?

Section 4.2 Predictors
By my calculation, the chisquare p value comparing 8/10 to 1/3 for the “strong interest” is 0.12. Please include statistics for the other comparisons in Table 2 between “abstinence” and “relapsed” groups.

Section 3.5 Delete “Power was limited due to small sample size” unless you can provide a post-hoc power analysis to verify the limited power.

Section 4.1
Here, “end of treatment” abstinence rates in this study are being compared to long-term abstinence rates in other studies—this is not a fair comparison. The typical 8 week “end of treatment” abstinence rate is 15% for placebo, and 25-40% for active therapies. (For example, see Jorenby et al NEJM 1999;340:685-91.)

Limitations
Add a statement like, "The program orientation may have introduced a selection bias that would overestimate the efficacy in other unselected populations."

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Table 1 is redundant, and could be deleted without loss of information if the references in the footnotes are moved to the manuscript text.

Typographical errors
Introduction, paragraph 3: “…relapse vulnerability in.”
Section 3.6 “devolvement”: Is this the correct word?
Table 1: “Checklist”
Discretionary Revisions (which the author can choose to ignore)

The Fagerstrom Test of Nicotine Dependence (FTND) questionnaire is typically used as a measure of tobacco dependence in these kinds of studies. Its absence is not a major problem, but limits the ability to compare study participants across studies.

**What next?:** Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

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

**Quality of written English:** Acceptable

**Statistical review:** No

**Declaration of competing interests:**

I declare that I have no competing interests.