PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (see an example) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below. Some articles will have been accepted based in part or entirely on reviews undertaken for other BMJ Group journals. These will be reproduced where possible.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Knowledge, attitudes, and preferences regarding genetic testing for smoking cessation. A cross-sectional survey among Dutch smokers
AUTHORS	Marieke Quaak, Chris Smerecnik, Frederik J. van Schooten, Hein de Vries, Constant P. van Schayck

VERSION 1 - REVIEW

REVIEWER	Colleen McBride, National Human Genome Research Institute,
	Social and Behavioural Research Branch
REVIEW RETURNED	21/09/2011

RESULTS & CONCLUSIONS	The discussion merely reiterates the results and needs a bit more polishing to indicate how they inform intervention development and targeting.
GENERAL COMMENTS	The manuscript describes results of a large survey of Dutch adults' beliefs and knowledge about genetic contributors to addiction. This is an important topic as it moves beyond the literature's heavy emphasis on beliefs about susceptibility to smoking-related disease to characterize perceptions that might more directly dovetail with cessation therapies. The report is well-written, succinct and straight forward. However, there are a few areas of missed opportunity that could increase the impact of the manuscript. The major area in need of some polishing is the discussion. The introduction led mke to expect that the authors might muse a bit more about how these results could inform intervention development or targeting therapy. Yet, the narrative mostly reiterates the results which is not very helpful. It was a bit disappointing not to hear a few more specifics about where we need to go from here. A minor point is that the format of "firstly", "secondly" is overdone and distracting.

REVIEWER	Laura Bierut, M.D. Professor of Psychiatry Washington University School of Medicine
	United States of America
REVIEW RETURNED	04/10/2011

THE STUDY	Major studies in addiction are not referenced, for example TAG Consortium, 2010, Thorgeirsson et al., 2010, Liu et al., 2010.
	The style of the manuscript is unusual. The paper was submitted in "track changes" mode. Many words or parts of words are placed in parentheses, such as "(Pharmaco)genetics". Furthermore, it appears that two discussion sections have been placed together.
GENERAL COMMENTS	The purpose of this study is to examine smokers' attitudes regarding genetic testing. The authors surveyed 614 smokers about their

knowledge and attitudes about smoking cessation and genetic factors involved in cessation. An important part of the study is that individuals expect their physicians to guide them as we enter into genetic testing.

However, there are many serious issues, which reduce the value of this manuscript.

The field of pharmacogenetic influences on smoking cessation is in its infancy. Genetic testing is not appropriate for smoking cessation at this time. Smokers underestimate their ability to quit. This may not be relevant to pharmacogenetics issues. Finally, the writing style of the manuscript is "unusual."

VERSION 1 – AUTHOR RESPONSE

Q1.1 The discussion merely reiterates the results and needs a bit more polishing to indicate how they inform intervention development and targeting. The manuscript describes results of a large survey of Dutch adults' beliefs and knowledge about genetic contributors to addiction. This is an important topic as it moves beyond the literature's heavy emphasis on beliefs about susceptibility to smoking-related disease to characterize perceptions that might more directly dovetail with cessation therapies. The report is well-written, succinct and straight forward. However, there are a few areas of missed opportunity that could increase the impact of the manuscript. The major area in need of some polishing is the discussion. The introduction led me to expect that the authors might muse a bit more about how these results could inform intervention development or targeting therapy. Yet, the narrative mostly reiterates the results which is not very helpful. It was a bit disappointing not to hear a few more specifics about where we need to go from here.

A1.1 We thank the reviewer for this suggestion. We have carefully restructured the discussion (sections previously used in other parts of the discussion are highlighted in yellow) and added some new information (marked as insertions using the track changes option).

- Q1.2 A minor point is that the format of "firstly", "secondly" is overdone and distracting. A1.2 This has been changed in the manuscript.
- Q2.1 Major studies in addiction are not referenced, for example TAG Consortium, 2010, Thorgeirsson et al., 2010, Liu et al., 2010.
- A2.1 Because of the large number of studies in this research area, and the minor importance for this manuscript of the influence of specific genetic variants on addiction, only general reviews on this subject are referenced. Therefore, the mentioned studies are not referenced.
- Q2.2 The style of the manuscript is unusual. The paper was submitted in "track changes" mode. Many words or parts of words are placed in parentheses, such as "(Pharmaco)genetics". Furthermore, it appears that two discussion sections have been placed together.
- A2.2 We apologize for the unusual style of the manuscript. This manuscript is an updated version of an earlier manuscript with adjustments made based on the requirements of this journal. We had intended to upload the clean version of the manuscript for reviewing, however, by accident not all adjustments were removed. We apologize for the inconvenience.
- Q2.3 The field of pharmacogenetic influences on smoking cessation is in its infancy. Genetic testing is not appropriate for smoking cessation at this time.
- A2.3 We have added a section on this in the limitations section:
- "Firstly, the field of pharmacogenetic influences on smoking cessation is still in its infancy, and therefore no well-accepted tests to tailor smoking cessation treatment are commonly available. However, it is of crucial importance to investigate the expectations of the smokers that are willing to

quit before a genetic test can be developed that will enter the market. This knowledge on smokers' expectations can drive the implementation, promotional strategy and the information given when the test will become available. Therefore, from a health promotion and marketing perspective it is appropriate to start asking these questions at this time."

Q2.4 Smokers underestimate their ability to quit. This may not be relevant to pharmacogenetics issues.

A2.4 The fact that smokers underestimate their ability to quit will indeed not be relevant for pharmacogenetics issue. However, it will influence the likelihood of smokers' taking up a genetic test for smoking cessation, since it will influence their perceptions of the importance of a genetic test. When they believe their chances of quitting are already high with the use of current pharmacotherapy, they might underestimate the possible benefit of a pharmacogenetic test.