

PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (<http://bmjopen.bmj.com/site/about/resources/checklist.pdf>) 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)	Assessing beliefs and risk perceptions on smoking and smoking cessation in immigrant Chinese adult smokers residing in Vancouver, Canada: a cross-sectional study
AUTHORS	Shum, Jessica; FitzGerald, J Mark; Poureslami, Iraj

VERSION 1 - REVIEW

REVIEWER	Dr. G Rajesh Dr. Rajesh G Additional Professor, Department of Public Health Dentistry, Manipal College of Dental Sciences, Manipal University, Mangalore - 575001 Karnataka, INDIA
REVIEW RETURNED	24-Sep-2014

GENERAL COMMENTS	<p>Overall, the study is very interesting and provided important information that might be crucial for tobacco cessation among immigrant population in Vancouver, Canada. The study has important implications for interventions for tobacco cessation, prevention and control of tobacco related disorders and policy implications as the authors have rightly indicated.</p> <p>Specific comments:</p> <p>Title:</p> <ul style="list-style-type: none">• Mention study population such as immigrant population in Vancouver, Canada.• Mention study design: cross-sectional study (the manuscript might not be a mixed-methods study, read comments below)• Consider deleting 'implications for intervention model'. Results might have a lot of implications for prevention and control of tobacco related diseases, has policy implications at various levels and not just implications for interventions. <p>Aims/objectives and outcome variables stated in different portions of the text:</p> <ul style="list-style-type: none">– Abstract: Objectives, page # 3, lines 5-11: We explored cultural and belief contexts for smoking habits within Mandarin and Cantonese speaking communities. The aim was to identify their perceived barriers and facilitators to successful cessation.– Introduction, page # 6, line 55 to page # 7, line 7: The purpose of this study was to explore smoking use patterns, including beliefs, attitudes and behaviour among Mandarin and Cantonese speaking communities living in the Greater Vancouver Area (GVA)– Methods, page # 8, lines 8-20: The training included approaches on how to best recruitbest information possible on Chinese
-------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

	<p>smokers' beliefs, attitudes, and perspectives regarding smoking and smoking cessation.</p> <ul style="list-style-type: none"> – Methods, page # 9, lines 29-39: The final questionnaire covered current smoking knowledge, beliefs, and attitudes about cigarettes, and exposure to smoking cessation aids. The tool included 70 questions covering demographics and concepts on smoking onset, smoking characteristics, perceptions, experience in quitting, social relationships, and cultural and environmental influences and were in the format of yes/no, true/false, multiple choice, and open-ended questions – Methods, data analysis, page # 11, lines 29-35: Binary logistic regression was used to determine the effects of demographic variables on beliefs, attitudes, knowledge and behaviour. – Discussion, page # 14, lines 50-56: The main aim of this study was to gain insight into the psychosocial factors and the perceptions associated with smoking and smoking cessation among Chinese Cantonese and Mandarin speaking current smokers, taking into account culturally specific beliefs and practices. <ul style="list-style-type: none"> • This can be confusing to the readers. The authors have to maintain uniformity as to what were the aims and objectives of the study, what has been assessed and what were the conclusions. • How do the authors differentiate between each of these domains in their questionnaire? • Consider giving mean knowledge scores and mean scores of each domain if it is feasible. <p>Abstract:</p> <ul style="list-style-type: none"> • Objectives is written very vaguely. Mention the outcomes variables explicitly. • Project design section of 'Methods' section mentions 'Knowledge, attitudes, beliefs and smoking pattern', none of which is mentioned in the objectives section of manuscript • Mention study population explicitly such as immigrant population in Vancouver, Canada. <p>Methods:</p> <ul style="list-style-type: none"> • After going through the methods section, the manuscript does not seem to be a "mixed-methods" study. Qualitative study was undertaken for instrument development and not for assessment of study outcomes. Employing a qualitative research strategy for instrument development does not make a study a "mixed-methods" study. • How do you differentiate between attitude, beliefs, perceptions and perspectives? • Also indicate which specific items in the questionnaire will tap into each of these domains in the methodology. • The authors have only reported to have assessed face and content validity. How about internal consistency values of the instrument? This becomes a crucial issue as the authors seem to have considered a variety of domains related to smoking. Besides, the authors need to present domain wise values of internal consistency values. <p>Results:</p> <ul style="list-style-type: none"> • Overall, consider presenting the mean knowledge scores and mean scores for each of the domains of attitude, beliefs, values, perceptions, if feasible. • Consider presenting the results on 'knowledge' component • Page # 13, line 32: "feeling when smoking" This aspect is tapped by which domain? Knowledge, attitude, beliefs, values, perceptions
--	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

	<p>or perspectives?</p> <ul style="list-style-type: none"> • Present the results of binary logistic regression analysis to determine the effects of demographic variables on beliefs, attitudes, knowledge and behaviour. <p>Discussion:</p> <ul style="list-style-type: none"> • Many aspects of results are mentioned for the first in discussion part. This might be confusing for the readers. • The results of the present study has implications for prevention and control of tobacco related health issues, policy implications towards the same. Discuss the same in discussion section. <p>Conclusions:</p> <ul style="list-style-type: none"> • Consider writing specific conclusions in line with aims and objectives. <p>References:</p> <p>Consider updating the references and adding the following references:</p> <ul style="list-style-type: none"> – Siahpush M, McNeill A, Hammond D, Fong GT. Socioeconomic and country variations in knowledge of health risks of tobacco smoking and toxic constituents of smoke: results from the 2002 International Tobacco Control (ITC) Four Country Survey. <i>Tob Control</i>. 2006 Jun;15 Suppl 3:iii65-70. – Borrelli B, Hayes RB, Dunsiger S, Fava JL. Risk perception and smoking behavior in medically ill smokers: a prospective study. <i>Addiction</i>. 2010 Jun;105(6):1100-8. – Binnal A, Rajesh G, Ahmed J, Denny C, Nayak SU. Insights into smoking and its cessation among current smokers in India. <i>Asian Pac J Cancer Prev</i>. 2013;14(5):2811-8. – Oncken C, McKee S, Krishnan-Sarin S, O'Malley S, Mazure CM. Knowledge and perceived risk of smoking related conditions: a survey of cigarette smokers. <i>Prev Med</i> 2005;40: 779-84. – Curry SJ, Grothaus L, McBride C. Reasons for quitting: intrinsic and extrinsic motivation for smoking cessation in a population-based sample of smokers. <i>Addict Behave</i> 1997; 22:727-39
--	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

REVIEWER	Xiaosy Shuiyuan Center for Global Health Central South University China
REVIEW RETURNED	27-Oct-2014

GENERAL COMMENTS	<ol style="list-style-type: none"> 1. The authors mentioned "This multi-stage mixed methods study employed both qualitative and quantitative components within an over-arching community-based participatory framework". However, instead of reporting findings from the qualitative components in the "Results" section, they reported many findings in the "Discussions" section. For example, "Several participants in this study indicated their desire to quit and attempted to do so many times, many of which did it relying on their own willpower and a few tried to quit due to health related issues, mainly among older smokers. They mentioned that a better communication with primary care providers and ease of access to culturally and linguistically appropriate smoking cessation resources would promote smoking cessation in their communities" were not reported in the "results" section; Moreover, qualitative methods related to these findings have
-------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

	<p>not been reported in the “methods” section.</p> <p>2. In the “results” section, authors expressed only such statistic values as χ^2 and P; They have not mentioned any actual numbers and percentages, this is inappropriate. For example, when authors say “We asked if ‘there is a different feeling when comparing times I smoke and don’t smoke’, and found a statistically significant difference between male and female participants ($\chi^2 = 4.237$; $df = 1$, $P < 0.05$)”, they should report how many males (percentage) and females (percentage) responded “yes” or “no” to the question “there is a different feeling when comparing times I smoke and don’t smoke”.</p> <p>3. The “discussion” section has not closely linked with the results. In other words, results, such as differences between groups (male vs female, younger vs older, Mandarin and Cantonese, etc.) have not been explained. From the title of this paper, one may assume cultural difference between Mandarin and Cantonese is a focus of this paper, but the authors did not mention it.</p> <p>4. Some important questions listed in the attached questionnaire have not been reported in this paper, for example, the section on “Certain situations trigger me to smoke” might contribute very interesting results which are relevant to smoking control policies.</p>
--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

VERSION 1 – AUTHOR RESPONSE

- Reviewer Name Dr. G Rajesh
 Institution and Country Dr. Rajesh G
 Additional Professor,
 Department of Public Health Dentistry,
 Manipal College of Dental Sciences,
 Manipal University,
 Mangalore - 575001
 Karnataka, INDIA
 Please state any competing interests or state ‘None declared’: None declared

Overall, the study is very interesting and provided important information that might be crucial for tobacco cessation among immigrant population in Vancouver, Canada. The study has important implications for interventions for tobacco cessation, prevention and control of tobacco related disorders and policy implications as the authors have rightly indicated.

Specific comments:

Title:

- Mention study population such as immigrant population in Vancouver, Canada.
- We added the immigrant Chinese adult smokers in the title as well as the study design (cross-sectional).
 - Mention study design: cross-sectional study (the manuscript might not be a mixed-methods study, read comments below)
- We added the study design type (cross-sectional) in the title.
 - Consider deleting ‘implications for intervention model’. Results might have a lot of implications for prevention and control of tobacco related diseases, has policy implications at various levels and not just implications for interventions.

- We modified the title accordingly.
Aims/objectives and outcome variables stated in different portions of the text:
- We tried to use an appropriate and similar term to identify the objectives/purpose, aims, and goals of the study (in the abstract and entire manuscript) according to the reviewer's suggestion. At the end of the 'Background', we specifically clarified the objectives of the study including assessing smoking patterns, smoking knowledge, beliefs and attitudes, and perceived barriers and facilitators to smoking cessation among the target communities as well as the effectiveness of socio-cultural and environmental factors affecting the onset of smoking and smoking habits. At the beginning of the 'Methods', we included the outcome variables which we measured in this study which includes awareness of smoking and its cessation, attitudes and beliefs about smoking harms and benefits, and cultural norms of smoking in their community.
 - Abstract: Objectives, page # 3, lines 5-11: We explored cultural and belief contexts for smoking habits within Mandarin and Cantonese speaking communities. The aim was to identify their perceived barriers and facilitators to successful cessation.
- As we mentioned above, we tried to be consistent in identifying the objectives and outcome variables in the abstract and entire manuscript.
 - Introduction, page # 6, line 55 to page # 7, line 7: The purpose of this study was to explore smoking use patterns, including beliefs, attitudes and behaviour among Mandarin and Cantonese speaking communities living in the Greater Vancouver Area (GVA)
- We modified this section to clearly state the objectives and outcome variables of the study.
 - Methods, page # 8, lines 8-20: The training included approaches on how to best recruitbest information possible on Chinese smokers' beliefs, attitudes, and perspectives regarding smoking and smoking cessation.
- We modified this section to what we stated in the objectives of the study.
 - Methods, page # 9, lines 29-39: The final questionnaire covered current smoking knowledge, beliefs, and attitudes about cigarettes, and exposure to smoking cessation aids. The tool included 70 questions covering demographics and concepts on smoking onset, smoking characteristics, perceptions, experience in quitting, social relationships, and cultural and environmental influences and were in the format of yes/no, true/false, multiple choice, and open-ended questions
- We modified this section and matched it with what we stated in the objectives and outcome variables of the study.
 - Methods, data analysis, page # 11, lines 29-35: Binary logistic regression was used to determine the effects of demographic variables on beliefs, attitudes, knowledge and behaviour.
- Again, we modified this section and matched it with the outcome variables of the study.
 - Discussion, page # 14, lines 50-56: The main aim of this study was to gain insight into the psychosocial factors and the perceptions associated with smoking and smoking cessation among Chinese Cantonese and Mandarin speaking current smokers, taking into account culturally specific beliefs and practices.
- We modified this section according to the suggestion received.
 - This can be confusing to the readers. The authors have to maintain uniformity as to what were the aims and objectives of the study, what has been assessed and what were the conclusions.
- As stated above, we modified all sections according to the suggestions we received from the reviewer.
 - How do the authors differentiate between each of these domains in their questionnaire?
- We attached a copy of the questionnaire as a supplement and each set of variables were identified by heading titles. The team members and the professional socio-psychology expert who helped to develop the study questionnaire separated the variables according to

knowledge, beliefs and attitudes, and perception as well as socio-cultural and environmental aspects of smoking. Part of this information has been included in the 'Measurement Tool Development' section.

- Consider giving mean knowledge scores and mean scores of each domain if it is feasible.
- Since different variables were used to identify knowledge and each domain, in practice it was inappropriate to make a mean from different questions, some of which were scored by "yes or no" and some of which used Likert scales. For this reason we didn't include mean scores.

Abstract:

- Objectives is written very vaguely. Mention the outcomes variables explicitly.
- We modified the objectives according to the suggestion.
- Project design section of 'Methods' section mentions 'Knowledge, attitudes, beliefs and smoking pattern', none of which is mentioned in the objectives section of manuscript
- We modified the project design section according to the suggestion.
- Mention study population explicitly such as immigrant population in Vancouver, Canada.

- We applied.

Methods:

- After going through the methods section, the manuscript does not seem to be a "mixed-methods" study. Qualitative study was undertaken for instrument development and not for assessment of study outcomes. Employing a qualitative research strategy for instrument development does not make a study a "mixed-methods" study.
- We changed this to a mutli-stage cross-sectional as we did the study in two different stages.
- How do you differentiate between attitude, beliefs, perceptions and perspectives?
- We attached a copy of the questionnaire as a supplement and each set of variables were identified by heading titles. The team members and professional socio-psychology expert who helped to develop the study questionnaire separated the variables according to knowledge, beliefs and attitudes, and perception as well as the socio-cultural and environmental aspects of smoking. Part of this information has been included in the 'Measurement Tool Development' section.

- Also indicate which specific items in the questionnaire will tap into each of these domains in the methodology.

- A copy of the questionnaire is attached as a supplement.
- The authors have only reported to have assessed face and content validity. How about internal consistency values of the instrument? This becomes a crucial issue as the authors seem to have considered a variety of domains related to smoking. Besides, the authors need to present domain wise values of internal consistency values.
- In the study measurement tool section, we provided information about the internal consistency checking of the data.

Results:

- Overall, consider presenting the mean knowledge scores and mean scores for each of the domains of attitude, beliefs, values, perceptions, if feasible.
- As mentioned before, since different variables were used to identify knowledge and each domain, in practice it was inappropriate to make a mean from different questions, some of which were scored by "yes or no" and some of which used Likert scales. For this reason we didn't include mean scores. However, we included more results; exclusively the triggers for smoking and socio-cultural and environmental aspects of smoking and its cessation in the results section.
- Consider presenting the results on 'knowledge' component

- **We did.**
 - Page # 13, line 32: “feeling when smoking” This aspect is tapped by which domain? Knowledge, attitude, beliefs, values, perceptions or perspectives?
- **It was modified according to the suggestion.**
 - Present the results of binary logistic regression analysis to determine the effects of demographic variables on beliefs, attitudes, knowledge and behaviour.
- **We recorded this information in the results section.**

Discussion:

- Many aspects of results are mentioned for the first in discussion part. This might be confusing for the readers.
- **We modified the results section to make sure it is matching with the information given in the discussion. In addition, we included more information in the discussion that is covered in the results but was not covered before.**
 - The results of the present study has implications for prevention and control of tobacco related health issues, policy implications towards the same. Discuss the same in discussion section.
- **As the beginning of the discussion, we talk about the implications of the study results on the development of appropriate smoking cessation programs and educational interventions as well as policy implications for health promotion programs to prevent smoking onset in this community.**

Conclusions:

- Consider writing specific conclusions in line with aims and objectives.
- **We modified the conclusion section to incorporate information about the objectives and aims of the study and only focused on the outcome variables we measured in this study.**

References:

Consider updating the references and adding the following references:

- Siahpush M, McNeill A, Hammond D, Fong GT. Socioeconomic and country variations in knowledge of health risks of tobacco smoking and toxic constituents of smoke: results from the 2002 International Tobacco Control (ITC) Four Country Survey. *Tob Control*. 2006 Jun;15 Suppl 3:iii65-70.
- Borrelli B, Hayes RB, Dunsiger S, Fava JL. Risk perception and smoking behavior in medically ill smokers: a prospective study. *Addiction*. 2010 Jun;105(6):1100-8.
- Binnal A, Rajesh G, Ahmed J, Denny C, Nayak SU. Insights into smoking and its cessation among current smokers in India. *Asian Pac J Cancer Prev*. 2013;14(5):2811-8.
- Oncken C, McKee S, Krishnan-Sarin S, O'Malley S, Mazure CM. Knowledge and perceived risk of smoking related conditions: a survey of cigarette smokers. *Prev Med* 2005;40: 779-84.
- Curry SJ, Grothaus L, McBride C. Reasons for quitting: intrinsic and extrinsic motivation for smoking cessation in a population-based sample of smokers. *Addict Behave* 1997; 22:727-39.
- **We added the suggested references in the text and reference section.**

Reviewer Name Xiaosy Shuiyuan

Institution and Country Center for Global Health

Central South University

China

Please state any competing interests or state 'None declared': None declared

The following aspects need to be considered:

1. The authors mentioned "This multi-stage mixed methods study employed both qualitative and quantitative components within an over-arching community-based participatory framework". However, instead of reporting findings from the qualitative components in the "Results" section, they reported many findings in the "Discussions" section. For example, "Several participants in this study indicated their desire to quit and attempted to do so many times, many of which did it relying on their own willpower and a few tried to quit due to health related issues, mainly among older smokers. They mentioned that a better communication with primary care providers and ease of access to culturally and linguistically appropriate smoking cessation resources would promote smoking cessation in their communities" were not reported in the "results" section; Moreover, qualitative methods related to these findings have not been reported in the "methods" section.
 - We modified the results and discussion sections as mentioned above to accommodate the suggestion made by the reviewers.
2. In the "results" section, authors expressed only such statistic values as χ^2 and P; They have not mentioned any actual numbers and percentages, this is inappropriate. For example, when authors say "We asked if 'there is a different feeling when comparing times I smoke and don't smoke', and found a statistically significant difference between male and female participants ($\chi^2 = 4.237$; $df = 1$, $P < 0.05$)", they should report how many males (percentage) and females (percentage) responded "yes" or "no" to the question "there is a different feeling when comparing times I smoke and don't smoke".
 - We added the actual numbers and percentages and also included three more tables to the results section.
3. The "discussion" section has not closely linked with the results. In other words, results, such as differences between groups (male vs female, younger vs older, Mandarin and Cantonese, etc.) have not been explained. From the title of this paper, one may assume cultural difference between Mandarin and Cantonese is a focus of this paper, but the authors did not mention it.
 - As mentioned above, we modified the results and discussion sections to cover the information identified in each section.
4. Some important questions listed in the attached questionnaire have not been reported in this paper, for example, the section on "Certain situations trigger me to smoke" might contribute very interesting results which are relevant to smoking control policies.
 - We included the new information for e.g., triggers to smoking in the results section and the corresponding tables.

VERSION 2 – REVIEW

REVIEWER	Xiao Shuiyuan Central South University, China
REVIEW RETURNED	12-Dec-2014

GENERAL COMMENTS	<p>“Study Measurement Tool”: Are the authors sure that these is no instrument about attitudes and beliefs of smoking? Actually, there are tons of studies on smoking related attitudes among all kinds of population. Perhaps there in no such instruments for the Canadian Chinese community.</p> <p>Table 2 and 3. Is there any difference between groups?</p>
-------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

REVIEWER	Dr. G Rajesh Manipal College of Dental Sciences, Manipal University, Mangalore - 575001 Karnataka, INDIA
REVIEW RETURNED	12-Dec-2014

GENERAL COMMENTS	<p>The manuscript now looks in a better shape and congratulations to the authors on completing the revision of the manuscript. The strength of the manuscript lies in the population that it is addressing. The present study does provide valuable information about tobacco use among Chinese immigrants in Vancouver.</p>
-------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------