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)	Children's exposure to second-hand smoke at home in Bangladesh: A community survey
AUTHORS	Huque, Rumana; Zafar Ullah, Abu; Akter, Salma; Nasreen, Shammi; Akter, Humaira; Thomson, Heather; Cameron, Ian; Newell, James; Siddiqi, Kamran

VERSION 1 - REVIEW

REVIEWER	Alistair Woodward Professor of Epidemiology School of Population Health University of Auckland New Zealand no competing interests
REVIEW RETURNED	04-May-2013

THE STUDY	The study objectives are not clearly stated. The paper includes information on attitudes to smoking, opinions on effective interventions, and beliefs about the health effects of second hand smoke, as well as an estimate of the proportion of children exposed to SHS. The methods section lacks any information on the content of the questionnaire - it is not evident how smoking is defined, nor what is meant by exposure to SHS in the home.
GENERAL COMMENTS	The strength of the paper is the information it provides on smoke exposures in the home in Bangladesh because the existing literature on exposures in developing countries is very light. I suggest the paper focuses more strongly on this issue. At present the paper includes other material that is relevant to the design of the randomised trial (eg the findings of the focus groups) but is a distraction here (in my view). I was left with the feeling the paper is padded, that it is too long, with too many figures and tables, in relation to its information content. As well as pruning the paper, I suggest that there is some very important material missing at present that should be added. The methods section should include a discussion of the questionnaire, and in particular what questions were asked about tobacco use, and how "a smoker" was defined. It would be helpful to know also how questions were asked about smoking in the home and around children. I suggest also that the tables that show the prevalence of smoking should display figures separately for men and women. Some comments on specifics: Abstract - Please revise the findings section. The second to last sentence is difficult to follow. I don't think it is true, based on the study findings, that "the vast majority" of children are exposed to

BMJ Open: first published as 10.1136/bmjopen-2013-003059 on 13 November 2013. Downloaded from http://bmjopen.bmj.com/ on June 9, 2023 by guest. Protected by copyright.

	SHS in Bangladesh, as is claimed in the conclusions. Introduction - rather than "there are no safe levels" I suggest "there is no evidence of a safe level" Methods - what is an "FGD"?

REVIEWER	Ana P. Martinez-Donate Assistant Professor Department of Population Health Sciences University of Wisconsin, Madison, WI, USA This reviewer has not conflict of interests.
REVIEW RETURNED	20-May-2013

GENERAL COMMENTS	**GENERAL COMMENTS** This manuscript addresses a very relevant topic and has a great level of novelty, given lack of data on secondhand smoke exposure in the home or use of home smoking bans for Bangladesh and many other developing countries. The use of mixed methods, including probability sampling survey procedures, in-depth interviews and focus groups, and coverage of both rural and urban settings represent additional strengths. The results from the qualitative data are well written and raise important issues that need to be targeted to reduce SHS exposure in this Bangladesh region. These results are also very informative in terms of possible intervention strategies to achieve this goal. Despite these strengths, the manuscript suffers from important limitations and needs major revisions in some aspects, as well as some minor, cosmetic revisions. **MAJOR REVISIONS** **Introduction** • Page 7, Lines 40-45: Provide more information about the study region (geographic location, population size and composition, etc). How it compares or not to other areas of Bangladesh. What determined the selection of this particular region? Ditto for the two study sites targeted by the survey. How can we be sure the results can be extrapolated to the rest of Bangladesh? This could be addressed narratively in the introduction and also by adding some specific data on socio-demographics for Bangladesh as a whole to Tables 1-3. **Methods** • Page 8, Line 32: What does it mean “reflecting Mirpur’s higher population”. Did the authors use random selection

BMJ Open: first published as 10.1136/bmjopen-2013-003059 on 13 November 2013. Downloaded from http://bmjopen.bmj.com/ on June 9, 2023 by guest. Protected by copyright.

	with probability proportional to population size? Please, explain this more clearly. • Page 8, Line 41: Same issue with the sentence "Households were selected in proportion to their ward distribution". Are the authors trying to say that they established target sample sizes for each stratum (pucca, semi-pucca, etc.). Or that selection was proportional to size? This part of the methods should be explained more clearly. • Page 8, Line 45: What is the "design effect" the authors are talking about? Is this part of the overall, larger intervention study this baseline survey was a part of? If so, please, explain this more effectively. • Page 9, Line 8: What percentage of households was excluded due to the absence of an adult respondent? Was this rate different depending on the site and type of housing? This could be also reported at the beginning of the Findings section. This information is important in order to estimate the potential bias this may have introduced. • Page 9, Lines 18-26: More information on how the study variables were assessed would be important. Even if a pre-tested questionnaire was used, more information about they way knowledge, smoking, smoking in front of children, and smoking restrictions were measured is critical to interpret the findings. In addition, provide sample questions for the in-depth interviews and for the question guide used for the focus groups. • Page 10, Lines 21-28: The description of the analytical methods used, for both the quantitative and qualitative data, should be more specific. What statistics were used for the quantitative data? What approach (i.e. inductive, deductive, mixed, etc.) was used for the qualitative data? **Findings:** • Page 11, Line19: Provide the response rate as a percentage of all eligible households. • Tables 1-3 should be combined into a single table reflecting the socio-demographic profile of the study sample(s). This new table should include information about Bangladesh as a whole, so the generalizability of the findings can be better assessed. In addition, education level should be provided here for the samples, regardless of smoking status. • Table 3: This table offers an analysis of the distribution of smoking by education level and study region. This does not seem to be the main focus of the paper, so the point of this table is unclear. If the association with education is of interest, then incorporate as part of the research questions, provide rationale in the introduction, and apply the stratification for the other study outcomes.

BMJ Open: first published as 10.1136/bmjopen-2013-003059 on 13 November 2013. Downloaded from http://bmjopen.bmj.com/ on June 9, 2023 by guest. Protected by copyright.

	• Page 16, Line 38: Replace "A vast majority" for the actual percentage. • In general, information on smoking restrictions should also be provided separately for households with and without smokers. • Where are the results regarding knowledge about SHS from the quantitative data? **Discussion:** • Page 23, Lines 43-47: The reference to cigarettes/bidi consumed per day and proportion of smokers [Did the authors mean "cigarettes"?] smoked in the house, etc. is not reported in the findings. I suggest adding that information to the results section or specifying between parentheses "(data not shown)". • The discussion needs to include the extent to which these results can be generalized to the larger Bangladesh based on the similarity or differences between the study area and the nation as a whole. **MINOR COMMENTS** **Abstract:** • I would tone down the first sentence of the conclusions. Instead of "vast majority", use the "majority", given that the rate was 55% of households. **Introduction:** • Page 7, Line 25: Add "A" before the word "Meta-analysis." In addition, please, provide timeframe for the mortality statistics offered. **Methods:** • Page 9, Line 36: It looks as if the word "was" was missing before the word "randomly". **Findings:** • Page 17, Line 46: The word "even" does not make sense in this sentence.

BMJ Open: first published as 10.1136/bmjopen-2013-003059 on 13 November 2013. Downloaded from http://bmjopen.bmj.com/ on June 9, 2023 by guest. Protected by copyright.

VERSION 1 – AUTHOR RESPONSE

Reviewer 1:
Alistair Woodward
Professor of Epidemiology
School of Population Health
University of Auckland
New Zealand

No competing interests
>>

Thank you for the comments. The revisions have been made accordingly (see below our responses. Revisions and changes have been highlighted in yellow and coloured in red).

Comment: The study objectives are not clearly stated.

Response:
We have now added/clarified the study objectives (page 6.lines.109 - 113)

Comments: The methods section lacks any information on the content of the questionnaire - it is not evident how smoking is defined, nor what is meant by exposure to SHS in the home.

Response:
We have completely re-written the 'methods' section (pages 7-11 lines 116-232.). We have also explained all the major concepts/definitions which have been used in this study (page 7 lines 120-138)

Comment: The strength of the paper is the information it provides on smoke exposures in the home in Bangladesh because the existing literature on exposures in developing countries is very light. I suggest the paper focuses more strongly on this issue.

Response:
Thank you for the comments. We have revised the manuscript accordingly. We have now re-written/revised the major sections of the manuscript (texts have been highlighted in yellow and coloured in red).

Comment: At present the paper includes other material that is relevant to the design of the randomised trial (e.g. the findings of the focus groups) but is a distraction here (in my view). I was left with the feeling the paper is padded, that it is too long, with too many figures and tables, in relation to its information content.

Response:
We have completely re-written the 'methods' section (pages 7-11 lines 116-232.). We have also removed tables 1-3 and replaced by one table (Table 1; see page 13 lines 258-260). The texts of the finding section also been revised (pages 12-22; major changes have been highlighted in yellow and coloured in red).

Comments: As well as pruning the paper, I suggest that there is some very important material missing at present that should be added. The methods section should include a discussion of the questionnaire, and in particular what questions were asked about tobacco use, and how "a smoker" was defined. It would be helpful to know also how questions were asked about smoking in the home

BMJ Open: first published as 10.1136/bmjopen-2013-003059 on 13 November 2013. Downloaded from http://bmjopen.bmj.com/ on June 9, 2023 by guest. Protected by copyright.

and around children. I suggest also that the tables that show the prevalence of smoking should display figures separately for men and women.

Response:
We have revised the whole manuscript and also added the information (major changes have been highlighted in yellow and coloured in red). The methods section has been re-written (pages 7-11 lines 116-232.); it includes a sub-section on 'concepts and definitions (page 7 lines 120-138). We have also explained about the questions asked about the tobacco use (page 9 lines 181-188).

The tables 1-3 have been removed and replaced with Table 1 (pages 13.lines 258-160).

Some comments on specifics:

Abstract - Please revise the findings section. The second to last sentence is difficult to follow. I don't think it is true, based on the study findings, that "the vast majority" of children are exposed to SHS in Bangladesh, as is claimed in the conclusions.
Introduction - rather than "there are no safe levels" I suggest "there is no evidence of a safe level"

Response:
Revised the relevant sections accordingly (page 3. lines.52-55). Also edited the sentences as suggested (page 4 line 57; and page 5 line 76).

Comment: Methods - what is an "FGD"?

Response:
We have clarified the term "FGD" (page 8. line.155)

Reviewer 2:
Ana P. Martinez-Donate
Assistant Professor
Department of Population Health Sciences
University of Wisconsin, Madison, WI, USA

This reviewer has not conflict of interests.

>>>

GENERAL COMMENTS

This manuscript addresses a very relevant topic and has a great level of novelty, given lack of data on secondhand smoke exposure in the home or use of home smoking bans for Bangladesh and many other developing countries. The use of mixed methods, including probability sampling survey procedures, in-depth interviews and focus groups, and coverage of both rural and urban settings represent additional strengths. The results from the qualitative data are well written and raise important issues that need to be targeted to reduce SHS exposure in this Bangladesh region. These results are also very informative in terms of possible intervention strategies to achieve this goal. Despite these strengths, the manuscript suffers from important limitations and needs major revisions in some aspects, as well as some minor, cosmetic revisions.

Response:
Thank you for the comments. The revisions have been made accordingly (see below our responses.

BMJ Open: first published as 10.1136/bmjopen-2013-003059 on 13 November 2013. Downloaded from http://bmjopen.bmj.com/ on June 9, 2023 by guest. Protected by copyright.

Revisions and changes have been highlighted in yellow and coloured in red).

MAJOR REVISIONS

Introduction

Comment: Page 7, Lines 40-45: Provide more information about the study region (geographic location, population size and composition, etc). How it compares or not to other areas of Bangladesh. What determined the selection of this particular region? Ditto for the two study sites targeted by the survey. How can we be sure the results can be extrapolated to the rest of Bangladesh? This could be addressed narratively in the introduction and also by adding some specific data on socio-demographics for Bangladesh as a whole to Tables 1-3.

Response:
We have re-written the 'introduction' (pages 5-6 lines 66-113) and 'methods' sections (pages 7-11 lines 116-232.). We have also removed tables 1-3 and replaced by one table (Table 1; see page 13 lines 258-260). The texts of the finding section also been revised (pages 12-22; major changes have been highlighted in yellow and the texts are coloured in red). Also added texts in the discussion section (pages 22-25 lines 433-497. New/revised texts are in red and highlighted in yellow).

Methods

Comment: Page 8, Line 32: What does it mean "reflecting Mirpur's higher population". Did the authors use random selection with probability proportional to population size? Please, explain this more clearly.

Response:
The methods section has been re-written (pages 7-11 lines 116-232.); it includes a sub-section on 'concepts and definitions (page 7 lines 120-138). We have also explained about the questions asked about the tobacco use (page 9 lines 181-188).

Comment: Page 8, Line 41: Same issue with the sentence "Households were selected in proportion to their ward distribution". Are the authors trying to say that they established target sample sizes for each stratum (pucca, semi-pucca, etc.). Or that selection was proportional to size? This part of the methods should be explained more clearly.

Response:
We have now clarified the design and sampling in the 'methods' section (pages 7-11 lines 116-232.).

Comment: Page 8, Line 45: What is the "design effect" the authors are talking about? Is this part of the overall, larger intervention study this baseline survey was a part of? If so, please, explain this more effectively.

Response:
We have now clarified the design and sampling in the 'methods' section (pages 7-11 lines 116-232.).

Comment: Page 9, Line 8: What percentage of households was excluded due to the absence of an adult respondent? Was this rate different depending on the site and type of housing? This could be also reported at the beginning of the Findings section. This information is important in order to estimate the potential bias this may have introduced.

BMJ Open: first published as 10.1136/bmjopen-2013-003059 on 13 November 2013. Downloaded from http://bmjopen.bmj.com/ on June 9, 2023 by guest. Protected by copyright.

Response:
We have added the information (page 9 lines 169-174)

Comment: Page 9, Lines 18-26: More information on how the study variables were assessed would be important. Even if a pre-tested questionnaire was used, more information about they way knowledge, smoking, smoking in front of children, and smoking restrictions were measured is critical to interpret the findings. In addition, provide sample questions for the in-depth interviews and for the question guide used for the focus groups.

Response:
We have now clarified the design and sampling in the 'methods' section (pages 7-11 lines 116-232.). Also provided more information on variables and broad topics covered during the interviews and FGDs (page 9 lines 181-188; and 200-206)

Comment: Page 10, Lines 21-28: The description of the analytical methods used, for both the quantitative and qualitative data, should be more specific. What statistics were used for the quantitative data? What approach (i.e. inductive, deductive, mixed, etc.) was used for the qualitative data?

Response:
We have completely re-written the 'methods' section (pages 7-11 lines 116-232.)

Findings:

Comment: Page 11, Line19: Provide the response rate as a percentage of all eligible households.

Response:
The comment has been addressed in the revised 'methods' section (pages 7-11 lines 116-232.).

Comment: Tables 1-3 should be combined into a single table reflecting the socio-demographic profile of the study sample(s). This new table should include information about Bangladesh as a whole, so the generalizability of the findings can be better assessed. In addition, education level should be provided here for the samples, regardless of smoking status.

Response:
We have merged the tables 1-3 into one (Table 1; see page 13 lines 258-260). The findings section has been updated to include additional demographic information about the survey respondents (page 12 line 242-256). The issue of generalisability has been discussed in the 'discussion' section (pages 24-25 lines 484-497).

Comment: Table 3: This table offers an analysis of the distribution of smoking by education level and study region. This does not seem to be the main focus of the paper, so the point of this table is unclear. If the association with education is of interest, then incorporate as part of the research questions, provide rationale in the introduction, and apply the stratification for the other study outcomes.

Response:
We have revised and edited tables 1-3 and replaced by Table 1 (page 13 lines 258-260).

Comment: Page 16, Line 38: Replace "A vast majority" for the actual percentage.

BMJ Open: first published as 10.1136/bmjopen-2013-003059 on 13 November 2013. Downloaded from http://bmjopen.bmj.com/ on June 9, 2023 by guest. Protected by copyright.

Response:
We have revised the paragraph accordingly (page 16 lines.293-298)

Comment: In general, information on smoking restrictions should also be provided separately for households with and without smokers.

Response:
We have added a new table (table 1) to show the characteristics of smokers and non-smokers (page 13 line 258-260). Also revised the section on 'smoking restrictions at home (page 16 lines 293-298)

Comment: Where are the results regarding knowledge about SHS from the quantitative data?

Response:
We have added quantitative data in Table 1 (page 13 lines 258-260).

Discussion:

Comment: Page 23, Lines 43-47: The reference to cigarettes/bidi consumed per day and proportion of smokers [Did the authors mean "cigarettes"?] smoked in the house, etc. is not reported in the findings. I suggest adding that information to the results section or specifying between parentheses "(data not shown)".

Response:
We have provided the relevant information in the findings section, as suggested (page 14 lines 67-68; coloured in red and highlighted in yellow)

Comment: The discussion needs to include the extent to which these results can be generalized to the larger Bangladesh based on the similarity or differences between the study area and the nation as a whole.

Response:
We have revised the relevant paragraph, as suggested (pages 24-25 lines.484-497)

MINOR COMMENTS

Abstract:

Comment: I would tone down the first sentence of the conclusions. Instead of "vast majority", use the "majority", given that the rate was 55% of households.

Response:
We have now used actual percentage (page 3 line 52)

Introduction:

Comment: Page 7, Line 25: Add "A" before the word "Meta-analysis." In addition, please, provide timeframe for the mortality statistics offered.

Response:
We have revised the whole 'introduction' section (pages 5-6 lines 66-113).

BMJ Open: first published as 10.1136/bmjopen-2013-003059 on 13 November 2013. Downloaded from http://bmjopen.bmj.com/ on June 9, 2023 by guest. Protected by copyright.

Methods:

Comment: Page 9, Line 36: It looks as if the word “was” was missing before the word “randomly”.

Response:
We have completely re-written the ‘methods’ section (pages 7-11 lines 116-232).

Findings:

Comment: Page 17, Line 46: The word “even” does not make sense in this sentence.

Response:
We have revised the sentence accordingly (Page 17 lines 308-311). Thank you.

Reviewer 1:
Alistair Woodward
Professor of Epidemiology
School of Population Health
University of Auckland
New Zealand

No competing interests
>>

Thank you for the comments. The revisions have been made accordingly (see below our responses. Revisions and changes have been highlighted in yellow).

Comment: The study objectives are not clearly stated.

Response:
We have now added/clarified the study objectives (page 6.lines.109 - 113)

Comments: The methods section lacks any information on the content of the questionnaire - it is not evident how smoking is defined, nor what is meant by exposure to SHS in the home.

Response:
We have completely re-written the ‘methods’ section (pages 7-11 lines 116-232.). We have also explained all the major concepts/definitions which have been used in this study (page 7 lines 120-138)

Comment: The strength of the paper is the information it provides on smoke exposures in the home in Bangladesh because the existing literature on exposures in developing countries is very light. I suggest the paper focuses more strongly on this issue.

Response:
Thank you for the comments. We have revised the manuscript accordingly. We have now re-written/revised the major sections of the manuscript (see highlighted in yellow).

Comment: At present the paper includes other material that is relevant to the design of the

BMJ Open: first published as 10.1136/bmjopen-2013-003059 on 13 November 2013. Downloaded from http://bmjopen.bmj.com/ on June 9, 2023 by guest. Protected by copyright.

randomised trial (e.g. the findings of the focus groups) but is a distraction here (in my view). I was left with the feeling the paper is padded, that it is too long, with too many figures and tables, in relation to its information content.

Response:
We have completely re-written the 'methods' section (pages 7-11 lines 116-232.). We have also removed tables 1-3 and replaced by one table (Table 1; see page 13 lines 258-260). The texts of the finding section also been revised (pages 12-22; major changes have been highlighted in yellow).

Comments: As well as pruning the paper, I suggest that there is some very important material missing at present that should be added. The methods section should include a discussion of the questionnaire, and in particular what questions were asked about tobacco use, and how "a smoker" was defined. It would be helpful to know also how questions were asked about smoking in the home and around children. I suggest also that the tables that show the prevalence of smoking should display figures separately for men and women.

Response:
We have revised the whole manuscript and also added the information (major changes have been highlighted in yellow). The methods section has been re-written (pages 7-11 lines 116-232.); it includes a sub-section on 'concepts and definitions (page 7 lines 120-138). We have also explained about the questions asked about the tobacco use (page 9 lines 181-188).

The tables 1-3 have been removed and replaced with Table 1 (pages 13.lines 258-160).

Some comments on specifics:

Abstract - Please revise the findings section. The second to last sentence is difficult to follow. I don't think it is true, based on the study findings, that "the vast majority" of children are exposed to SHS in Bangladesh, as is claimed in the conclusions.

Introduction - rather than "there are no safe levels" I suggest "there is no evidence of a safe level"

Response:
Revised the relevant sections accordingly (page 3. lines.52-55). Also edited the sentences as suggested (page 4 line 57; and page 5 line 76).

Comment: Methods - what is an "FGD"?

Response:
We have clarified the term "FGD" (page 8. line.155)

Reviewer 2:
Ana P. Martinez-Donate
Assistant Professor
Department of Population Health Sciences
University of Wisconsin, Madison, WI, USA

This reviewer has not conflict of interests.

>>

BMJ Open: first published as 10.1136/bmjopen-2013-003059 on 13 November 2013. Downloaded from http://bmjopen.bmj.com/ on June 9, 2023 by guest. Protected by copyright.

GENERAL COMMENTS

This manuscript addresses a very relevant topic and has a great level of novelty, given lack of data on secondhand smoke exposure in the home or use of home smoking bans for Bangladesh and many other developing countries. The use of mixed methods, including probability sampling survey procedures, in-depth interviews and focus groups, and coverage of both rural and urban settings represent additional strengths. The results from the qualitative data are well written and raise important issues that need to be targeted to reduce SHS exposure in this Bangladesh region. These results are also very informative in terms of possible intervention strategies to achieve this goal. Despite these strengths, the manuscript suffers from important limitations and needs major revisions in some aspects, as well as some minor, cosmetic revisions.

Response:
Thank you for the comments. The revisions have been made accordingly (see below our responses. Revisions and changes have been highlighted in yellow).

MAJOR REVISIONS

Introduction

Comment: Page 7, Lines 40-45: Provide more information about the study region (geographic location, population size and composition, etc). How it compares or not to other areas of Bangladesh. What determined the selection of this particular region? Ditto for the two study sites targeted by the survey. How can we be sure the results can be extrapolated to the rest of Bangladesh? This could be addressed narratively in the introduction and also by adding some specific data on socio-demographics for Bangladesh as a whole to Tables 1-3.

Response:
We have re-written the 'introduction' (pages 5-6 lines 66-113) and 'methods' sections (pages 7-11 lines 116-232.). We have also removed tables 1-3 and replaced by one table (Table 1; see page 13 lines 258-260). The texts of the finding section also been revised (pages 12-22; major changes have been highlighted in yellow). Also added texts in the discussion section (pages 22-25 lines 433-497. New/revised texts are highlighted in yellow).

Methods

Comment: Page 8, Line 32: What does it mean "reflecting Mirpur's higher population". Did the authors use random selection with probability proportional to population size? Please, explain this more clearly.

Response:
The methods section has been re-written (pages 7-11 lines 116-232.); it includes a sub-section on 'concepts and definitions (page 7 lines 120-138). We have also explained about the questions asked about the tobacco use (page 9 lines 181-188).

Comment: Page 8, Line 41: Same issue with the sentence "Households were selected in proportion to their ward distribution". Are the authors trying to say that they established target sample sizes for each stratum (pucca, semi-pucca, etc.). Or that selection was proportional to size? This part of the methods should be explained more clearly.

Response:
We have now clarified the design and sampling in the 'methods' section (pages 7-11 lines 116-232.).

BMJ Open: first published as 10.1136/bmjopen-2013-003059 on 13 November 2013. Downloaded from http://bmjopen.bmj.com/ on June 9, 2023 by guest. Protected by copyright.

Comment: Page 8, Line 45: What is the “design effect” the authors are talking about? Is this part of the overall, larger intervention study this baseline survey was a part of? If so, please, explain this more effectively.

Response:
We have now clarified the design and sampling in the ‘methods’ section (pages 7-11 lines 116-232.).

Comment: Page 9, Line 8: What percentage of households was excluded due to the absence of an adult respondent? Was this rate different depending on the site and type of housing? This could be also reported at the beginning of the Findings section. This information is important in order to estimate the potential bias this may have introduced.

Response:
We have added the information (page 9 lines 169-174)

Comment: Page 9, Lines 18-26: More information on how the study variables were assessed would be important. Even if a pre-tested questionnaire was used, more information about they way knowledge, smoking, smoking in front of children, and smoking restrictions were measured is critical to interpret the findings. In addition, provide sample questions for the in-depth interviews and for the question guide used for the focus groups.

Response:
We have now clarified the design and sampling in the ‘methods’ section (pages 7-11 lines 116-232.). Also provided more information on variables and broad topics covered during the interviews and FGDs (page 9 lines 181-188; and 200-206)

Comment: Page 10, Lines 21-28: The description of the analytical methods used, for both the quantitative and qualitative data, should be more specific. What statistics were used for the quantitative data? What approach (i.e. inductive, deductive, mixed, etc.) was used for the qualitative data?

Response:
We have completely re-written the ‘methods’ section (pages 7-11 lines 116-232.)

Findings:

Comment: Page 11, Line19: Provide the response rate as a percentage of all eligible households.

Response:
The comment has been addressed in the revised ‘methods’ section (pages 7-11 lines 116-232.).

Comment: Tables 1-3 should be combined into a single table reflecting the socio-demographic profile of the study sample(s). This new table should include information about Bangladesh as a whole, so the generalizability of the findings can be better assessed. In addition, education level should be provided here for the samples, regardless of smoking status.

Response:
We have merged the tables 1-3 into one (Table 1; see page 13 lines 258-260). The findings section has been updated to include additional demographic information about the survey respondents (page 12 line 242-256). The issue of generalisability has been discussed in the ‘discussion’ section (pages 24-25 lines 484-497).

BMJ Open: first published as 10.1136/bmjopen-2013-003059 on 13 November 2013. Downloaded from http://bmjopen.bmj.com/ on June 9, 2023 by guest. Protected by copyright.

Comment: Table 3: This table offers an analysis of the distribution of smoking by education level and study region. This does not seem to be the main focus of the paper, so the point of this table is unclear. If the association with education is of interest, then incorporate as part of the research questions, provide rationale in the introduction, and apply the stratification for the other study outcomes.

Response:
We have revised and edited tables 1-3 and replaced by Table 1 (page 13 lines 258-260).

Comment: Page 16, Line 38: Replace "A vast majority" for the actual percentage.

Response:
We have revised the paragraph accordingly (page 16 lines.293-298)

Comment: In general, information on smoking restrictions should also be provided separately for households with and without smokers.

Response:
We have added a new table (table 1) to show the characteristics of smokers and non-smokers (page 13 line 258-260). Also revised the section on 'smoking restrictions at home (page 16 lines 293-298)

Comment: Where are the results regarding knowledge about SHS from the quantitative data?

Response:
We have added quantitative data in Table 1 (page 13 lines 258-260).

Discussion:

Comment: Page 23, Lines 43-47: The reference to cigarettes/bidi consumed per day and proportion of smokers [Did the authors mean "cigarettes"?] smoked in the house, etc. is not reported in the findings. I suggest adding that information to the results section or specifying between parentheses "(data not shown)".

Response:
We have provided the relevant information in the findings section, as suggested (page 14 lines 67-68; highlighted in yellow)

Comment: The discussion needs to include the extent to which these results can be generalized to the larger Bangladesh based on the similarity or differences between the study area and the nation as a whole.

Response:
We have revised the relevant paragraph, as suggested (pages 24-25 lines.484-497)

MINOR COMMENTS

Abstract:

Comment: I would tone down the first sentence of the conclusions. Instead of "vast majority", use the "majority", given that the rate was 55% of households.

BMJ Open: first published as 10.1136/bmjopen-2013-003059 on 13 November 2013. Downloaded from http://bmjopen.bmj.com/ on June 9, 2023 by guest. Protected by copyright.

Response:
We have now used actual percentage (page 3 line 52)

Introduction:

Comment: Page 7, Line 25: Add “A” before the word “Meta-analysis.” In addition, please, provide timeframe for the mortality statistics offered.

Response:
We have revised the whole ‘introduction’ section (pages 5-6 lines 66-113).

Methods:

Comment: Page 9, Line 36: It looks as if the word “was” was missing before the word “randomly”.

Response:
We have completely re-written the ‘methods’ section (pages 7-11 lines 116-232).

Findings:

Comment: Page 17, Line 46: The word “even” does not make sense in this sentence.

Response:
We have revised the sentence accordingly (Page 17 lines 308-311). Thank you.

VERSION 2 – REVIEW

REVIEWER	Ana P. Martinez-Donate, PhD Associate Professor Department of Population Health Sciences University of Wisconsin, Madison United States I have no competing interests to declare.
REVIEW RETURNED	28-Jul-2013

GENERAL COMMENTS	The authors have addressed satisfactorily most of my previous concerns and the manuscript has now improved substantially. There are a few remaining issues that should be addressed. In their response, the authors claim they have addressed them, but this reviewer could not find a satisfactory answer in the revised manuscript. These include: 1. Explain what is the “design effect” the authors mention when justifying the sample size. I assume this refers to the larger trial from which data for this study originate, but this should be clarified. 2. There is still very limited information on how the study variables were assessed. A more detailed description of the way knowledge, smoking, smoking in front of children, and smoking restrictions were measured is still necessary. Likewise, the question guide or a

BMJ Open: first published as 10.1136/bmjopen-2013-003059 on 13 November 2013. Downloaded from http://bmjopen.bmj.com/ on June 9, 2023 by guest. Protected by copyright.

	sample of the questions used for the focus groups would be very helpful. 3. It seems as if the questionnaire included questions on knowledge about SHS. However, this information is never presented in the tables, figures, or text. If knowledge was indeed included in the survey, the results should be presented. Some new issues also need attention. These are listed below. 4. In page 23 (lines 462-463), the authors claim that the differences in smoking rates between the two regions could be partly explained by the differences in literacy rates. Some supporting references for the association between literacy and smoking in Bangladesh or similar regions, or additional information supporting this statement would be important. 5. Page 24, lines 471-473, the sentence *"Evidence also suggests that the parents' educational level and smoking status has been attributed to the attitudes and experiences of the tobacco preventive work"* is unclear and should be rewritten to more effectively convey its meaning. 6. Page 25, lines 495-497, the authors write *"It is expected that there might be some area-wise variations, but the similarities are so dominant that such variations can be considered insignificant."* The claim that variations can be considered insignificant needs to be toned down or further supported by specific information on the similarities between the study areas and the rest of Bangladesh. With the information currently provided, all we can say is that we do not know the extent to these variations.

VERSION 2 – AUTHOR RESPONSE

1. Data presented here does not originate from a trial. It was a survey in which a multistage, stratified, cluster random sampling approach was adopted and design effect was used to inflate the sample size to account for any correlation within survey clusters. This point has now been clarified in the relevant section.

2. This information is now provided as follows:
'Smoking' was defined as consumption of at least one cigarette/bidi/cigar per day, or usage of pipe at

BMJ Open: first published as 10.1136/bmjopen-2013-003059 on 13 November 2013. Downloaded from http://bmjopen.bmj.com/ on June 9, 2023 by guest. Protected by copyright.

least once a day.If a person smoked inside the house when children are around, was considered as 'smoking in front of children' for this study. We considered people smoking outside the house, when they smoked on the balcony/ veranda, courtyard, roof-top and/or on the road adjacent to house. This was considered as 'complete restrictions' of smoking at home. Those who smoked anywhere in the house were considered having 'no restrictions' of smoking at home. Those who smoked inside the house but only in a specified room with window open, was defined as maintaining 'partial restrictions' at home. (will be included in page 7 under concepts and definitions)
Six FGDs were conducted in total, four in Mirpur and two in Savar, aiming to triangulate survey findings. A 'snowballing' method - starting from a local health facility - was used to identify potential FGD participants and interviewees. Eight to ten participants were selected for each FGD who represented different establishments of the local community such as schools, media, religious institutions, health facilities, local businesses, factories, and farms; members of local women groups and housewives were also included. FGDs were conducted to assess people's knowledge on adverse effects of SHS, explore potential ways of reducing SHS exposure to children and other non-smokers and identify possible challenges in implementing smoking restrictions at home (will be included in page 10 under methods).
3. Knowledge was assessed in terms of their their perceptions regarding harms of smoking and SHS, especially infront of children and pregnant women. This has been clarified in section 3.5 in the main text.

4. We have now included supporting references to this effect as follows:
Smoking prevalence in Bangladesh is higher among people with lower levels of educational achievements (GATS, 2009). There is also evidence to suggest that homes tend to have fewer restrictions on smoking when heads of households did not receive education beyond school (Ref Alwan et al).

5. We have now reworded this statement as follows:

Evidence also suggests that non-smoking parentswith higher educationare more supportive of tobacco preventative initiatives than those who smoke and/or have lower educational achievements. ([17] Carlsson N, Johansson N K, Hermansson G et al. Parents' attitudes to smoking and passive smoking and their experience of the Tobacco preventive work in child health care Journal of Child Health Care The online version of this article can be found at: DOI: 10.1177/1367493510382243. 2010)

6. We have reworded this statement as follows:

It is expected that there might be some geographical variations, the true extent of which will remain unknown until a more representative survey is conducted.

BMJ Open: first published as 10.1136/bmjopen-2013-003059 on 13 November 2013. Downloaded from http://bmjopen.bmj.com/ on June 9, 2023 by guest. Protected by copyright.