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.

ARTICLE DETAILS

TITLE (PROVISIONAL)	A comprehensive assessment of health education and health
	promotion in 5 non-communicable disease demonstration districts
	in China: a cross-sectional study
AUTHORS	Xu, Qiaohua; Huang, Yuelong; Chen, Biyun

VERSION 1 – REVIEW

REVIEWER	Elizabeth Dean
	University of British Columbia
	Canada
REVIEW RETURNED	12-Apr-2017

GENERAL COMMENTS	This study aimed to provide a comprehensive assessment of health education and health promotion in non-communicable disease in demonstration districts in China.
	The investigators provided a sound rationale, clearly articulated aims, appropriate and meticulously conducted methods (the TOPSIS however I am less familiar with but it was described so it was understandable), well described results and their presentation, and cogent development of the discussion and conclusion. The manuscript was certainly above average in terms of scientific writing with minimal grammatical errors. The study is interesting and adds to the body of knowledge in a novel manner. Well done.
	I am curious to know whether there is correspondence in the counties between their rankings and NCD burdens. This query may go beyond the scope of the study, but may be worth a mention somewhere perhaps in future studies. We would hope that this is so. This leads to issues about cost:effectiveness and which elements of programs need to be developed and targeted. This may vary across counties depending on sociodemographics and other considerations.
	A few comments below that I would rate of an important but not substantive nature. The title might be more informative with the inclusion of the addition of 'in China' at the end. Not sure if this then exceeds a title word limit. If so, the 'A' could be deleted at the beginning.
	Abstract Lines 44-45. Something does not quite seem parallel in the sentence structure. Abstract line 47. I suggest replacing 'were proved' with 'were shown'

Line 142. Edit to something like 'All experts had bachelor degrees (in public health, and 63% had master's degrees.' Page 12 Lines 72-74. Please edit these last two sentences. I was unable to quite make sense of them. Also, edit to 'The variances
were'
Page 12 Line 76. Edit to 'We are grateful to all'
Note: unless the BMJ Open instructions to authors states
embedding the tables into the manuscript, I suggest not doing so.
The conventional format of sequencing the tables as well as the
figures on separate pages at the end, facilitates reviewing.

REVIEWER	Usha Raman
	University of Hyderabad, India
REVIEW RETURNED	19-May-2017
GENERAL COMMENTS	The paper describes a highly quantitative approach to evaluating health education and promotion work in key "demonstration" districts in China, as well as to arrive at a set of indicators that can be applied in future work that evaluates such efforts in the context of NCDs. It is certainly a worthwhile effort, which may be better assessed by a person more comfortable with statistics than I am. However, while the subject matter of the paper is certainly valuable, it requires major revisions in terms of language and contextualization, as well as some nod to theory in the area. It is not clear why these districts were selected as exemplary ones, nor is the content of the health education/promotion work alluded to. For scholars who would seek to apply such a framework, it would be important to understand these issues.

REVIEWER	Rohina Joshi The George Institute for Global Health, Australia
REVIEW RETURNED	24-Jun-2017

GENERAL COMMENTS	Please find below my comments:
	1. Consider editing the title e.g. 'A comprehensive assessment of
	health education and health promotion for non-communicable disease prevention in 5 demonstration districts in China'
	2. Abstract – the objectives in the abstract are currently structured as points rather than sentences that flow. They need to be redrafted.
	3. Please provide a reference for current burden of disease – lines 69, 70 and 71
	4. What is the aim of the demonstration districts? What conditions do they include? Is there a program for evaluating the
	demonstration program? For the readers who are new to the
	concept of 'demonstration cities', it would be useful to give a brief background and mention the current activities.
	5. The majority of experts chosen for the Delhi technique were from CDC, given that the health education and promotion
	programs were developed by CDC, how was the conflict of interest managed?

- 6. How was the qualitative data collected and analysed?
- 7. The discussion states that the health education and promotion is effective what is this sentence based on? The variables to assess the program were designed, but the acceptability and effectiveness have not been measured.
- 8. There is no ethics statement did the participants give consent to participate?
- 9. There are grammatical errors and problems with sentence construction throughout the paper which need attention.
- 10. The objective of the paper, significance, and methods need to described with more clarity. e.g it would be useful if one of the variables like funding support available is described in the methods section. This would give the reader a better idea of how the variables were chosen, coded and organised.
- 11. Reference formatting should be checked different fonts have been used.

VERSION 1 – AUTHOR RESPONSE

To Elizabeth Dean

- 1. Title: The title was edited to 'A comprehensive assessment of health education and health promotion in 5 non-communicable disease demonstration districts in China: a cross-sectional study'.
- 2. Abstract Lines 44-45. not parallel in the sentence structure: We deleted the word 'However', and added new description of the results in the abstract.
- 3. Abstract line 47. replacing 'were proved' with 'were shown': We replaced that sentence with a new conclusion of the conclusion in the abstract.
- 4. Line 142. experts degrees: Done in Lines 158-159.
- 5. Page 12 Lines 72-74. edit last two sentences: Done in Page 12, line 243.
- 6. Page 12 Line 76. Edit to 'We are grateful to all: Done in Page 12, line 248.

To Usha Raman

- 1. The language and contextualization problem: The paper was revised to a new version with those problems fixed.
- 2. why these districts were selected as exemplary ones: They were randomly selected from the total 28 participants with geographical distribution balancing. The select standard was described in lines 128-132.
- 3. The content of the health education/promotion work: added in lines 86-93.
- 4. Question about 'some nod to theory in the area? Sorry, I'm not sure what it exactly means. Could you please explain it a little more?

To Rohina Joshi

- 1. Title: The title was edited to'A comprehensive assessment of health education and health promotion in 5 non-communicable disease demonstration districts in China: a cross-sectional study'.
- 2. The objectives: The objectives in the abstract have been revised to the following complete sentence: This study aims to develop assessment indicators of health education and promotion for non-communicable diseases (NCDs) demonstration districts in China, and find out the significant factors associated with NCDs health education and promotion work.

- 3. Reference for current burden of disease was added in line 74.
- 4. The aim of the demonstration districts was added in lines 78-80. The conditions were added in lines 80-84. The answer for question 'Is there a program for evaluating the demonstration program?' is seen in lines 95-96.
- 5. Although the majority of experts were from CDC, they came from nationwide and worked for different CDC branches. None of them participated in developing health education and promotion programs in Hunan province. Besides, they didn't know other experts' names due to anonymous characteristics of Delphi procedure in this study. There is no conflict of interest in this procedure.
- 6. Data collection: Part of indicator data, including people awareness of NCDs and healthy behavior, satisfaction with supplies of health education and promotion, health literacy level in NCDs, were collected on population based sampling survey. The rest data were collected from various files of local government, CDC and TV stations. Data analysis was described in methods section in lines 145-153.
- 7. Effectiveness of health education and promotion: We think you're right. Current data is not enough to conclude 'the health education and promotion is effective'. This study did not collect the history data of those district or compare data from non NCD demonstration districts. It was listed as a limitation of our study in the paper. For this reason, we have removed that statement from this paper.
- 8. Ethics statement: added in lines 259- 'This study was approved by Ethics Committee of Hunan provincial Center for Disease Control and Prevention (HNCDC/JL31-044: 2013011) '. Some indicator data were collected on population based sampling survey. All participants gave consent to this survey. The rest data was collected from local government, CDC, TV station, with no human participation.
- 9. The grammatical errors and problems with sentence construction were corrected.
- 10. Clarity of the objective, significance, and methods: They were revised. The updated objective was in lines 27-29 (the abstract) and lines 97-100 (the introduction), while the significance was listed in the introduction section. Due to the paper length limitation, the method section did not include explanations for detailed items.
- 11. The different fonts of references were fixed.

VERSION 2 - REVIEW

REVIEWER	Elizabeth Dean University of British Columbia Canada
REVIEW RETURNED	06-Sep-2017

GENERAL COMMENTS	Although not trivial as I have listed as minor revision, the manuscript needs to be completely proof read and copy edited. There are innumerable grammatical and compositional errors; too numerous for me to list, even though the work can be generally understood.
	I appreciate how challenging scientific writing particularly in a second language. I could never do this. I can only applaud the authors. I would like them to know, that we are all asked to improve the flow and the language of our manuscripts. Just yesterday, we had a major revision decision on a paper that was largely related to language and clarity. To put this in perspective, we have 20 authors, half of whom have English as a first language or are highly proficient in English. So be encouraged, you are not alone.

VERSION 2 – AUTHOR RESPONSE

1. Proof read and copy edited.

American Journal Experts (AJE) was chosen to provide a premium editing service for our manuscript. They edited the manuscript for grammar, clarity, and consistency with a specific emphasis on improving the language of the text.

2. Grammatical and compositional errors.

It's corrected for an article (the, a, an) usage in several sentences. For example, "a" was revised to "the" in "the Technique for Order Preference by Similarity to Ideal Solution (TOPSIS)" to refer to a specific method. In contrast, "a" was inserted in "a fitness trail" to indicate that the statement was referring to a hypothetical rather than a specific fitness trail.

In several complete sentences consisting of two simple sentences each, we reversed the position of the simple sentence. For example, "Between late 2013 and 2015 in Hunan province, China, three complementary techniques were used to conduct this study" was revised to "Three complementary techniques were used to conduct this study in Hunan Province, China, between late 2013 and 2015".

3. Language and clarity.

To improve the clarity and tone, some words such as "it", "those", or other nondescript words were substituted with the corresponding noun (e.g., "they had been working" with "the experts had been working" or "it provides" with "this method provides"). In some sentences, words that were not present in the original were included for clarity (e.g., "To ensure a balanced geographic distribution" vs. "To ensure a balanced geographic distribution of the districts").

Several edits were made to reduce the use of colloquial expressions or informal language. For example, "some 260 million Chinese" was changed to "approximately 260 million Chinese," "to get a recommendation" was changed to "to obtain a recommendation," and "stayed as assessment indicators" was changed to "remained as assessment indicators."

Please review the "revised manuscript marked copy" in the file upload for more details.