

Peer Review Report

Review Report on Food choices and hypertension among rural Thais–Evidence from a Discrete Choice Experiment

Original Article, Int J Public Health

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EVALUATION

Q 1 Please summarize the main findings of the study.

The aim of the study is to explore the difference between food choices between hypertensive group (HG) and normotensive group (NG) in Thailand with particular emphasis on consumption of salt. Using a discrete choice experiment (DCE), the authors quantify the relative importance of selected food attributes and interaction effects. The findings propose that the amount of salt is important for both groups. Nevertheless, the interaction effect suggests that normotensive group is more attentive to the salt amount in food than the hypertensive group. The hypertensive group is more likely to purchase cheaper food despite high salt content. The findings of the study suggest dietary habits of families are important and that educational efforts with regards to creating more awareness for the amount of salt in food should be given to the family as a whole.

Q 2 Please highlight the limitations and strengths.

The main limitation of the study is that the sample is too small and non representative due to convenience sampling rather than random sampling. There is also lack of diversity across the sample. Additionally, the topic is cognitively challenging for the sample to understand.

The strengths is the possibility to conduct face to face interviews with the sample. The survey instrument contains pictures for facilitating the understanding of the concepts. Use of discrete choice experiment method is suitable for the purpose of the study. Selection of the different combinations of the attributes is possible in discrete choice experiments and I think that the choice of method is a strength of the study.

Q 3 Please provide your detailed review report to the authors. The editors prefer to receive your review structured in major and minor comments. Please consider in your review the methods (statistical methods valid and correctly applied (e.g. sample size, choice of test), is the study replicable based on the method description?), results, data interpretation and references. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.

Major Comments:

The aim of the study is to explore the hypertension related food choices across individuals living in Northern Thailand. The study uses discrete choice experiment and presents the individuals different food attributes. The analysis aims to explore the differences in food choices between the two groups of individuals (hypertensive and normotensive group). Although the topic and the design of the study is original and interesting, there are several major points that needs attention:

1. The paper does not have hypotheses. Instead, the authors present two research questions. The first research question, "Is the relative importance of the attribute, amount of salt ranked lower in the hypertensive group than the normotensive group?" is more like a hypothesis than a research questions since it is leading to an expectation. The wording for research question should be revised. The second research question "Is there any difference in food choices between the hypertensive and normotensive groups?" is also too general and should be presented with more elaboration. More importantly, the research questions does not lead to a theoretical framework. A solid theory is lacking. Why would we expect that the food choices to be different between the two groups? Why would we expect that the amount of salt to be ranked lower in the hypertensive group than the normotensive group? Overall a major weakness of the study is lack of a theoretical model and lack of hypotheses that would emerge from the theory.

2. The choice of the method (DCE) is revealed before the research questions. However, a usual procedure in an academic paper is that the choice of methods is presented after a detailed discussion of research questions and hypotheses.
3. The paper lacks a thorough literature review. A detailed presentation of the state of the art is missing.
4. The method begins with the description of the attribute selection before describing the discrete choice method. This is confusing for the reader.
5. In the methods section, the paper needs to convincingly explain the choice of the population and the sampling method. Use of convenience sample is non representative due to non random selection of the respondents. The authors should provide more detailed explanation regarding the sampling procedure. The paper should provide more explanation and convincing arguments to justify the sampling frame and sampling method. The sample size calculation is well explained but more information is needed with regards to the distribution of the sample across the villages and different demographic groups.
6. The paper does not provide intuitive explanations on the findings. For example, why do the NG is less likely to purchase food high in salt despite the taste; why do the HG less likely to purchase the cheaper price food; why do the HG less likely to purchase ready to eat; why would the HG more likely to purchase cheaper food despite high salt? The findings are difficult for meaningful interpretation. The reason may be due to the lack of theoretical background that leads to a conceptual framework and hypotheses.
7. The paper does not provide explanations regarding whether the pictures used in the DCE were pre tested and were easily comprehended by the sample. For example, the "cheaper" picture still shows a deck of money which is not very descriptive of cheapness. The salt picture resembles a bottle, maybe a salt shaker would be more easily to be understood. A simple explanation is needed on the suitability of the pictures to the comprehensive ability of the sample.

Minor comments:

1. Line 69: What is the combination of the multidisciplinary team?
2. Line 77: The salt content is associated with nutritional attribute which is misleading. Nutritional attribute is a wider concept. This wording should be changed.
2. Line 83 and onwards: The DCE explanation should be moved to the beginning of the methods section.
3. Line 121: Taro Yamane formula for sample size (needs reference)
4. Line 170: No need to mention the name of the statistical package.

PLEASE COMMENT

Q 4 Is the title appropriate, concise, attractive?

The title is appropriate, concise and attractive.

Q 5 Are the keywords appropriate?

The keywords are appropriate.

Q 6 Is the English language of sufficient quality?

The English language is appropriate.

Q 7 Is the quality of the figures and tables satisfactory?

Yes.

Q 8 Does the reference list cover the relevant literature adequately and in an unbiased manner?

Yes, but the paper lacks a detailed literature review section to demonstrate the state of the art.

QUALITY ASSESSMENT

Q 9 Originality

Q 10 Rigor

Q 11 Significance to the field

Q 12 Interest to a general audience

Q 13 Quality of the writing

Q 14 Overall scientific quality of the study

REVISION LEVEL

Q 15 Please make a recommendation based on your comments:

Major revisions.