Title: Iodine Nutritional Status after the Implementation of the New Iodized Salt Concentration Standard in Zhejiang Province, China

Authors:

Yan Zou (zouyan0573@sina.com)
Xiaoming Lou (xmlou@cdc.zj.cn)
Gangqiang Ding (zouyan0573@gmail.com)
Zhe Mo (zhmo@cdc.zj.cn)
Wenming Zhu (difang901@yeah.net)
Guangming Mao (difang903@yeah.net)

Version: 4 Date: 3 July 2014

Author's response to reviews: see over
Dear Editors and Reviewers:

Thank you for your letter and for the reviewers’ comments concerning our manuscript entitled “Iodine Nutritional Status after the Implementation of the New Iodized Salt Concentration Standard in Zhejiang Province, China (Manuscript Number: 2020010636125692). Those comments are all valuable and very helpful for revising and improving our paper, as well as the important guiding significance to our researches. We have studied comments carefully and have made correction which we hope meet with approval. Revised portion are marked using the track changes mode. The main corrections in the paper and the responds to the reviewer’s comments are as flowing:

Responds to the reviewer’s comments:

Response to Editors:

We have invited a native English speaker reviews our manuscript.

Responds to the reviewer’s comments:

Abstract:

1. I felt that the abstract did not sufficiently account for the implications of the study’s findings.

   We have revised the abstract according to reviewer’s suggestion.
   (Line42-62)

2. In the methods section of the abstract, participant numbers should be
We have added the numbers of participants in the methods section of abstract. (Line 42-45)

3. In the conclusions section of the abstract, some attempt to interpret in summary form why there were significant differences between 2011-2013 for urban, and also why this wasn’t the case for rural measurements.

We have revised the conclusions section of the abstract, and try to interpret the significant differences between year 2011 and 2013 for urban residents. (Line 56-60)

4. From the abstract I wasn’t sure whether your results show that the 2012 policy of adjusting the standard salt iodine concentration was effective, ineffective or potentially harmful at the population level?

We have revised the conclusions section of the abstract to confirm that the new policy for adjusting the standard salt iodine concentration is effective. (Line 56-57)

Discussion:

1. Again, it wasn’t fully clear whether your study’s results support the government’s decision to reduce the standard salt iodine concentration. It would appear as though from lines 190-192, that this was a successful policy: The median urinary iodine concentration of children aged 8-10 years in the survey of year 2013 falls between 100-199µg/L suggesting that they were in optimal iodine status.” However, as you note in lines
At the time the new local iodization policy put forward, iodine nutrition was generally adequate in both urban areas and rural areas. Does the significant difference between 2011-2013 suggest that the 2011 iodine levels were too high in urban areas and too low in rural areas, or simply that this is variation across a healthy norm? If the former, then the results support how monitoring of iodine levels can have an important impact. However for the purposes of publication in a research journal like BMC, the findings are less impactful if the changes between 2011-2013 merely show variation within a healthy/satisfactory range.

According to reviewer’s suggestion, we have revised the discussion to make it clear that our results supported the government’s decision to reduce the standard salt iodine concentration.

Our results indicated the median urinary iodine concentration of children aged 8-10 years was 174.3µg/L in the survey of year 2013, which was significantly lower than that of year 2011 with median urinary iodine concentration 237.1µg/L. According to the criteria from WHO/UNICEF/ICCIDD 2007 for assessing iodine nutrition [14], the median urinary iodine concentration of children aged 8-10 years in year 2011 was in the interval of more than adequate (200-299µg/L), suggesting that people could have the risk of iodine-induced hyperthyroidism. Iodine nutrition status of people was adequate after the adjustment of iodized salt concentration in year 2012. The median urinary
iodine concentration of children aged 8-10 years in the survey of year 2013 falls between 100-199 µg/L suggesting that they were in optimal iodine status, suggesting that government’s decision to reduce the standard salt iodine concentration was a successful policy. In fact, China has made 5 adjustments since the implementation of universal salt iodization. The adjustments were based on the result of iodine nutritional status of people by surveillance which was carried out every two years. Based on the recent surveillance results and risk assessment, the government decided to reduce the standard iodine concentration in 2012. So maintaining USI at an appropriate level is an important part of preventing IDDs and could have important impact on maintaining optimal iodine nutritional status of people.


1. Why did the government decide to reduce the standard salt iodine concentration in 2012?

   In fact, China has made 3 adjustments since the implementation of universal salt iodization. The adjustments were based on the result of iodine nutritional status of people by surveillance which was carried out every two years. Based on the recent surveillance results and risk assessment, the government decided to reduce the standard iodine concentration in year 2012. (Line 203-210).
2. The readability of the manuscript can be improved, and I would recommend further proof reading. E.g. line 66-67: “USI has been considered as world’s best achievements” (either this is poorly expressed, or the claim needs to be significantly adjusted/toned down).

   We have corrected typos and careless mistakes on the manuscript, and we have improved the writing in this vision. (Line 72-74), (Line 229-231), (L255-257)…

Responds to the reviewer’s comments:

1. Why are the numbers of table 1 and 2 inconsistent, 8553 vs. 8392 and 8909 vs. 8814?
   
   We have checked the figures in table 1 and table 2.

2. Please delete coefficients, and then move chi-square and p values next to 95% CI in table 2.
   
   We have checked the figures in table 2.

   
   We have improved the writing in this vision.

4. Line 196 pointed out or showed?
   
   We have improved the writing in this vision.

5. Line 198 correct the results of OR and 95% CI to 2 decimal places as well as that throughout the paper.
   
   We have checked the figures in the manuscript.
We are very sorry for our negligence in preparing the manuscript and we have made corrections on the manuscript. We appreciate for Editors/Reviewers’ warm work earnestly, and hope that the correction will meet with approval. Once again, thank you very much for your comments and suggestions.

Sincerely,

Yan Zou

Zouyan0573@sina.com