Author's response to reviews

Title: Factors associated with knowledge of hypertension among adolescents: implications for preventive education programs in primary care

Authors:

Iga Grad (igagrad@o2.pl)
Agnieszka Mastalerz-Migas (agnieszka.migas@gmail.com)
Katarzyna Kilis-Pstrusinska (katarzyna.kilis-pstrusinska@umed.wroc.pl)

Version: 3 Date: 29 March 2015

Author's response to reviews: see over
Dear Sir,

Thank you very much for your letter considering our manuscript entitled “Factors associated with knowledge of hypertension among adolescents: implication for preventive education programs in primary care” (MS: 1168497231500805).

We are grateful to the Reviewers for their valuable comments which helped us to improve our manuscript. Please find enclosed the revised version of our paper. We have corrected our manuscript to respond to all queries raised during the review process. All modifications have been marked in the text. We hope that the revised version will be found suitable to be published in BMC Public Health.

The manuscript has been seen by a native English speaker.
All statistical analyses were made and have been checked by professional statistician.
In respect to the Editorial Requests:
1. Acknowledgements: not applicable. Only the authors contributed towards the article.
2. The Competing Interests and Authors’ Contributions were moved to after the Conclusion Section.

Following modifications have been made:

Ad Referee 1: Stella Stabouli
1. Reviewer: Background: Page 3 lines 43-47 are difficult to interpret. The authors may re-write this part in a more comprehensive way.
Authors: The above-mentioned part of the text has been changed.

2. **Reviewer: Background**: Page 4 lines 51-60 should be incorporated in the text.
Authors: Done as suggested.

3. **Reviewer: Methods**: Page 4 lines 67-69 should be incorporated in the text.
Authors: Done as suggested.

4. **Reviewer: Methods**: A table with the author questionnaire should be added.
Authors: We added the questionnaire as an attachment.

5. **Reviewer**: Please explain what do the authors mean: page 4 lines 72-73 “each of the questioned...” and page 5, lines 81-82 “...was confirmed in the mock...”?, line 97: refer to 1-4 sten...
Authors: The above-mentioned sentences have been changed. We are very sorry that they had been formulated unclearly.

6. **Reviewer**: Are the Personal Competence Scale and the Personal Values List validated for use in adolescents?
Authors: Personal Competence Scale and the Personal Values List were validated for adolescents. Their reliability and accuracy ratios have been added to the text.

7. **Reviewer**: Please describe what statistical methods were used for each analysis.
Authors: Statistical analysis of the study has been described.

8. **Reviewer**: Results: How was the global knowledge of HT defined? How the global knowledge of HT was graded and scored?
Authors: Global knowledge of HT was defined as a sum of knowledge of epidemiology, causes, symptoms, complications, ways of treatment and preventive undertakings of HT. The following percentage ranges were applied: 75% or above of correct answers were considered as good knowledge of HT, 74 – 50% and lower than 50% were defined as medium and unsatisfactory knowledge of HT.

9. **Reviewer**: Results: page 7 line 131-132: “ The has...”? Please explain what the authors mean.
Authors: The sentence was incorrect. It has been revised.

10. **Reviewer**: Results: The authors should refer to non-statistical significant results more briefly.
Authors: Authors: Done as suggested.

11. **Reviewer**: The authors should add the limitations of the study.
Authors: The limitations of the study have been added.
1. **Reviewer:** This paper needs major language editing.
Authors: The entire manuscript was double-checked by a native English speaker to correct spelling and grammar mistakes.

2. **Reviewer:** Page 3, line 33: ‘primary hypertension’ is ‘essential hypertension’?
Authors: The term ‘primary hypertension’ means the same as ‘essential hypertension’. Both terms are used in the literature.

3. **Reviewer:** Page 4, ‘age = level of education’ = ‘age corresponding to different stages of education’?
Authors: We are grateful to the reviewer for his accuracy. In fact, we analysed the association between the level of knowledge of hypertension and the stage of education (I, II or III class of secondary school). We have corrected our mistake.

4. **Reviewer:** Statistical analysis of this epidemiological study should be more thoroughly described. Statistical analysis is unadjusted, and thus subject to biases. It would be worth performing a multivariate logistic regression analysis to identify factors, which are independent predictors of ‘good’, ‘medium’ and ‘weak’ knowledge about HT in this adolescent population.
Authors: Statistical analysis of the study has been thoroughly described. We agree with the reviewer that it would be worth performing a multivariate logistic analysis. However, our primary aim of the study was a little different. Nowadays, having the present results, we will undertake next analysis to identify factors which are independent predictors of the level of knowledge about hypertension in this population.

5. **Reviewer:** Methods should describe in more detail where and when this study was conducted, how the study participants were recruited, how many subjects were screened and how many of them refused to complete the questionnaires. A schematic providing this information would be relevant.
Authors: The methods have been described in more detail, according to the suggestion of the Referee.

6. **Reviewer:** Had the questionnaire been used in any previously published study. If yes, please cite the relevant reference.
Authors: The author questionnaire was prepared for the purposes of this study. It has not been published. We added the questionnaire as an attachment.
7. Reviewer: Table 1 is nowhere mentioned in the text.
Authors: Table 1 was mentioned in the text: page 4, line 65.

8. Reviewer: Page 10, lines 199-203. Please try to avoid statements like ‘Females are spotted to be better...according to the sex division’ unless strongly suggested by considerable literature.
Authors: We agree with the reviewer that the sentences “Females are spotted...“(page 10, lines 199-203) were inappropriate. There were only suggestions in some papers. In fact, the study results concerning knowledge of heart diseases among adolescents depending on the sex are conflicting. The part of the text has been deleted.

9. Reviewer: Most of the Discussion section has been consumed in repeating this study’s results accompanied by several hypotheses trying to explain these results. I would suggest the authors to compare their data with relevant data of other previously published cohort studies instead.
Authors: We have tried to change our discussion according to the Reviewer’s suggestion. However, in the literature, to the best of our knowledge, there is not data concerning knowledge of HT among adolescents. There are only single articles about knowledge of heart disease. Their results were taken into consideration.

10. Reviewer: Does this study have any limitations?
Authors: The limitations of the study have been added.

Sincerely Yours,
Katarzyna Kiliś-Pstrusińska