Reviewer's report

Title: Trends in electrocardiographic abnormalities and risk of cardiovascular mortality in Lithuania, 1986-2015

Version: 0 Date: 19 Nov 2018

Reviewer: Domantas Jasilionis

Reviewer's report:

The paper provides new and important evidence on the long-term trends in the prevalence of electrocardiographic (ECG) abnormalities and their impact on risk of CVD deaths in an Eastern European country. This is important considering that reliable evidence about the peculiarities of this relationship in the region is scarce. The major strength of this study include using high quality long-term series of data covering various CVD risk factors and characteristics in the random urban and rural samples of the Lithuanian population. The paper is well written and structured. The hypotheses and interpretations of the results are well framed using international comparisons and evidence. Very notable advantage of this study concerns highlighting the importance of including of ECG abnormalities into the CVD prediction models. The authors restrict their study to the period until 2008. I would recommend to add some information about developments after 2008 which marks the beginning of the period of remarkable mortality decline in Lithuania. It would be interesting to have at least a paragraph about a more recent decline in CVD mortality and its sustainability in the future in the context in the changing risk factors. This information can be obtained from relevant literature, published statistics, and smaller scale studies. It would be also desirable to have a short description of recent changes in treatments and prevention. Finally, few sentences are needed to highlight public health importance of the observed long-term and ongoing changes for general CVD mortality trends and reducing the life expectancy gap against Western countries. In my opinion, this paper can be accepted for publication in BMC Cardiovascular Disorders after the aforementioned minor revisions.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.
Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
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I am able to assess the statistics

Quality of written English
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Needs some language corrections before being published

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