Reviewer’s report

Title: The Prevalence, Burden and Risk Factors associated with Chronic Obstructive Pulmonary Disease in Commonwealth of Independent States countries (Ukraine, Kazakhstan and Azerbaijan): Results of the CORE study

Version: 0 Date: 06 Nov 2017

Reviewer: Lori D. Wilson

Reviewer’s report:

This research was conducted under funding provided by GlaxoSmithKline to investigate the prevalence of COPD in Commonwealth of Independent (CIS) Countries of Ukraine, Kazakhstan and Azerbaijan as part of the larger CORE Study. The results of this study provide a comprehensive and detailed analysis of the prevalence, comorbidities, demographics and severity of COPD among the CIS. Additionally, detailed information is provided that compare the results of this study to studies conducting in other regions of the world.

The findings of the study appeared to be sufficiently supported by proper statistically procedures and reporting.

Some of the grammatical structure and wording was difficult to comprehend. Listed below are section, which I found awkward.

Under the "Prevalence of COPD" section:

Similar picture was obtained for the prevalence of COPD among respondents ≥ 40 years old (Figure 2).

Would suggest: A similar picture…..

Under "Comorbidities" section:

Pneumonia in anamnesis (36.7% vs 19.4%, p=0.024 in Ukraine, 31.7% vs 14.9%, p=0.001 in Kazakhstan and 17.1% vs 5.9%, p=0.019 in Azerbaijan in COPD and non-COPD populations respectively) and previous cardiovascular disease (26.7% vs 6.0%, p<0.001 in Ukraine, 22.2% vs 7.8%, p=0.001 in Kazakhstan and 22.9% vs 3.5%, p<0.001 in Azerbaijan in COPD and nonCOPD populations respectively) were significantly more frequent in COPD population than in non-COPD population in all investigated countries.

Would suggestion:"A history of pneumonia.." instead of, "Pneumonia in anamnesis…"

Also consider making the first sentence two sentences.
Under the "Discussion" section: The following sentence(s) do not read well. Suggest rewording.

Relatively higher prevalence rates of COPD were observed in Kazakhstan compared to Ukraine and Azerbaijan; one of possible explanation may be relatively poor ecological conditions in Almaty, which is surrounded by high (3,000 - 5,000 meters) mountains and has not windy climate, whereas in Kiev and Baku it is windy and there is river or sea.

For example, in Kazakhstan as early as 10-15 years ago COPD was considered to be as "exotic" disease; COPD diagnosis could be more probably established in specialized institutions, not by primary care physicians. Nowadays COPD is much more known, however, some public health problems may still exist; for example, medications for COPD treatment are free for a patient that may force health authorities to regulate the number of COPD patients registered in primary and specialty care.

Under the "Limitations" section: Typos and grammar

The subjectivity of the diagnostic criteria based on symptoms can lead to over-s or underdiagnosis. Spirometry was only one objective diagnostic method in the present study and its results were reviewed centrally, but difficulties of conducting can affect the results of this procedure

Formatting errors were found in Tables 5 and 6

In Figure 6, are the y-axis variables supposed to be OR? 1.0 instead of 1,0, etc.

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.

Yes

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?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.
I am able to assess the statistics

**Quality of written English**
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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