Reviewer’s report

Title: Control of cardiovascular risk factors and its determinants in the general population- Findings from the STAAB Cohort Study

Version: 0 Date: 11 Sep 2017

Reviewer: Umberto Barbero

Reviewer’s report:

Tiffe et al present an interesting population study on prevalence and control of cardiovascular risk factors in Germany. It is an interesting paper, given the recently published ESC Guidelines on prevention (2016) and the importance we all should give to prevention. They included 1379 patients without CVD: they report high prevalence of people to be physically inactive and/or overweight, and many others with CV risk factors not adequately controlled by therapy and confirmed correlation with already known factors like low level of education. The english is correct despite some mistakes that make the paper requiring a grammar check along all the sections.

I thin that the paper is worthy of publishing, after some minor essential revisions.

In the introduction, line 67-70, the authors should stress also the importance of perform a complete assessing of CV risk factors and adherence to guidelines proposed therapy in patients including inflammations markers (e.g. PCR) or EF, as shown in this metanalysis (Assessing Risk in Patients with Stable Coronary Disease: When Should We Intensify Care and Follow-Up? Results from a Meta-Analysis of Observational Studies of the COURAGE and FAME Era. Scientifica (Cairo). 2016;2016:3769152.) that could be cited.

In the introduction, line 72-74, the sentence: "Therefore, we assessed the prevalence of adequate control of cardiovascular vascular risk factors as well as determinants of accumulation of insufficiently controlled in people without established CVD" is not clear and should be improved.

In Methods, page 4 line 99: the indicated target BP for diabetic populations <140/85 mmHg is the one for type 2 DM. The authors should add <130/80 mmhg in type 1 DM and in younger Type 2 DM patients.

In Methods, page 5 line 105: in the sentence "All not treated or not self-reported risk factors…” please correct with: "All the not treated or not self-reported risk factors…”

In statystical analysis, page 5, line 120 the authors report the use of the previous cut-off (<140/85 mmHg) for the analysis of BP inin subjects with diabetes: would they provide the same analysis adding a more strong cut-off of <130/80 mmHg, eventually dividing younger from older patients?
How the author choose to assess age, sex, education and marital status in the multivariate analysis? were this factor selected a priori or after univariate analysis?

Page 5, line 124 change "ods" ratio to "odds" ratio.

In discussion, page 8, line 178-180, the sentence is badly written : "A substantial number of individuals did not self-report an objectively prevalent cardiovascular vascular risk factor and in an ample number of participants on guideline recommended medication set treatment targets were not achieved." should be corrected in "A substantial number of individuals did not self-report any objectively prevalent cardiovascular risk factor and in a sample number of participants on guidelines recommended medication, treatment targets were not achieved."

In discussion, subheading "Determinants of cardiovascular risk factor control" in page 12, line 283, after discussion of differences in age distribution and dyslipydemia the authors should add a short sentence to stress the importance of this two factors in subsequent evolution of atherosclerotic plaques (see for example and the need for reference the results from the FORMIDABLE OCT registry: Culprit plaque characteristics in younger versus older patients with acute coronary syndromes: An optical coherence tomography study from the FORMIDABLE registry. Catheter Cardiovasc Interv. 2017 Jul 12.)

Table 2, page 25, check the CI upper lower of the last row ("widowed"): maybe 226 should be 2.26.

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?
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I am able to assess the statistics

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

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