Reviewer’s report

Title: Prevalence, and health- and sociodemographic associations for visits to traditional and complementary medical providers in the seventh survey of the Tromsø Study

Version: 0 Date: 19 Sep 2019

Reviewer: Zdenka Ďuračková

Reviewer's report:

The influence of vitamin D on several pathophysiological conditions and diseases has been extensively discussed in recent years. The present work deals with the effect of genetically lowering vitamin D levels on risk factors of metabolic syndrome or its metabolic traits using mendelian randomization methodology.

The results of the work are significant and bring benefits, despite the undetected association between the genetically determined reduction of 25 (OH) D and an increased risk of metabolic syndrome

However, the manuscript requires little refinement:
The authors report that there were 60% women in the study population and 40% men in Table 1.

Authors should define the data collection questionnaire more precisely. Has the questionnaire been standardized and validated? (lines 129-131)

2. In Table 1, the number of men and women, their age and other parameters should be added separately, as the gender dependent level of vit. D is known. For women, it should be reported how many women (%) were of the hormone active age

3. Figure 2 was not found in the manuscript ((lines 231-232)

4. All abbreviations and symbols used in Figure 1 should be explained in the legend to the figure. The discussion is well and comprehensible. The conclusion is adequate to the presented result.
Level of interest
Please indicate how interesting you found the manuscript:

An article of importance in its field

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

Acceptable

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