Reviewer’s report

Title: Leisure-Time Physical Activity among Nigerians

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Reviewer: Tomi Mäkinen

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'Leisure-Time Physical Activity among Nigerians'
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BMC Public Health Research article

1 General

The Authors have examined socio-demographic variation in leisure-time physical activity among African adults with a cross-sectional data collected in an urban setting. The data is small and restricted to government worksite in Abuja. However, the target population is challenging and, therefore, results would be of interest to many readers in the areas of social inequalities in physical activity. The authors have applied regression models to examine determinants of leisure-time physical activity. The main findings were that only 20% of the examined urban African people meet the current recommendations of physical activity after adjusting for age, sex and body-mass index. Being married significant determinants for being physically active compared to non-married persons whereas younger individuals were more likely to be physically inactive compared to older individuals.

2 Major Compulsory Revisions (which the author must respond to before a decision on publication can be reached)

2.1 Title: Title of the paper “Leisure-time physical activity among Nigerians” is misleading and uninformative for the reader. The paper examines the determinants of leisure-time physical activity, uses a cross-sectional data and focuses on urban individuals. This should be clarified in the title.

2.2 Abstract, “Methods”-part is lacking necessary information that describes the dataset used in this study such as year of the study, agegroups examined, and participation rate similarly described as in the Methods-sections. The main variables and outcome should also be shortly described.

2.3 Abstract, “Results”-part: The results is too long for my opinion, only focus on the main results from where the conclusions are drawn.

2.4 Introduction, Third para: “…as the use of these methods are not feasible in large epidemiology studies, physical activity is usually measured by self-reports with questionnaires.” This seem a little too arbitrary sentence. To my knowledge, recently there has been a quite few large epidemiological studies that have
applied objective methods to measure PA. The authors are suggested to open this sentence more.

2.5 Introduction: the conclusion refers WHO’s recommendations of physical activity but the information is missing from the introduction. Is presented in the discussion but should already be presented earlier. The Authors are encouraged to add the original reference for PA recommendations and open them to the reader in the introductions.

2.6. Introduction: The authors should add another paragraph to the end of introduction to describe the reasoning and justification why this kind of study is needed and also present to research questions as well as hypothesis (if applicable?).

2.7. Discussion: The table 1 show significant inequalities in physical activity (in METh) based on education and occupation as well as socioeconomic status, but this issue has not been discussed? Moreover, the results regarding the associations between smoking, alcohol and physical activity. Why did you not examine all of these associations in Table2?

2.8 Discussion: The discussion lacks reflection of the weaknesses and strengths of the current study. Authors are encouraged to add this kind of reasoning the discussion.

3 Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

3.1 Methods, “Demographic and socioeconomic factors”: In the abstract also results are shown based on marital status but in the methods there is no information about the marital status measures?

3.2. Statistical analyses, firs para: The information about the “physical activity was analysed in tertiles, “calculation of body mass index” should be moved into section were the different measures are described before the “statistical analyses”-section. Statistical analyses section should include only analyze strategy.

3.3 Results: The place markings of where the tables should be place are missing from the text?

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests