Reviewer’s report

Title: Prevalence of Hypertension and Associated Cardiovascular Risk Factors in an Urban Slum in Nairobi, Kenya. A population-based survey

Version: 1
Date: 22 April 2014
Reviewer: Mekoya Mengistu

The findings are not novel but very important and interesting as they expand on the limited knowledge regarding the prevalence of hypertension in developing countries and associated cardiovascular risk factors.

Major compulsory revisions

1. Abstract
   a. Result section: ….we enrolled 2061 adult…. But the total number of subjects indicated in your demographic data (table1) and other data like table 5 is different.
      This requests serious attention.
   b. Rewrite the result section of your abstract as it lacks clarity

2. Introduction
   a. Change the heading to background to conform the format of the journal
   b. Give brief background information regarding the prevalence the prevalence of hypertension in Kenya/the region and Nairobi/urban areas in particular

3. Methods
   a. Paragraph2:
      i. How did you measure the hip circumference (eg. At the widest level over the greater trochanter)
      ii. BMI, waist circumference, and waist to hip ratio classifications need to be
cited properly

b. Paragraph 4: Research assistants underwent training on completion of the STEPS questionnaire and on anthropometric and blood pressure measurements to ensure standardization. Does this mean the training was given after the completion of the experiment? If so, why? Normally common training program should be given for data collectors on how to get reproducible measurements beforehand.

c. You did not indicate how you measured ISBP and IDBP

d. Have you used any exclusion criteria? Eg. For measuring waist circumference...

4. Result

a. Rewrite paragraph 1 as the percentage (figures) is not consistent with data in the demographic data

b. Physical activity: rewrite the first paragraph as it very protracted.

c. BMI is written under physical activity. But you can give it a separate heading

d. The p-values should be written properly and consistently throughout the manuscript (Eg. P=0.001 or p<0.05).

e. Blood pressure section

i. Rewrite the first and fourth paragraphs as they lack clarity

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ii. Paragraph four should be merged with paragraph three

iii. Paragraph six should be merged with paragraph five and should be refined

iv. The preferred sequence of putting your findings of blood pressure:

1. Fist data related to prevalence of hypertension

2. Then data related to awareness of being hypertensive

3. Data related to SBP and DBP in the study population

5. Discussion

a. Your discussion on prevalence of hypertension is not adequate. You need to compare the current prevalence with previous findings of similar studies.


b. Your discussion on cardiovascular risk factors (PA, smoking, alcohol consumption.....) is very scanty. You need to discuss the effects of cardiovascular risk factors on hypertension and changes in blood pressure. You also need to compare the current findings with similar previous studies.

6. Limitation
a. Level of education, socioeconomic variation amongst the slum dwellers, and lipid profile were not included in your study. Therefore can be included as limitation

7. Reference
a. Rewrite your references according the format of the journal
b. References should also contain all named authors, regardless of the number. The terms 'et al.' should not be used. Hence correct you reference number 2, 13, 17...

Minor corrections:
1. Abstract
   a. Method section: 8
      th
      line:-...random capillary blood sugar>11; the author should have unit of measurement.

2. Introduction/Background
   b. Paragraph 2, line 5: .....hypertension organ damage should be .....hypertensive organ damage
   c. Paragraph 3, line 4: .....urban area[7], needs full stop at the end
   d. Paragraph 3, line 6:....... Risk factor.[8] should be ..... Risk factor[8].
   e. Paragraph 3, line 9: ......50.1 percent should be .....50.1% (consider consistency)
   f. Paragraph 4, line 5: further 75% of urban... Should be Furthermore, 75% of urban...

3. Methods
a. Paragraph 1, line 1: The urban slum of Kibera in Nairobi, the capital of Kenya was ...

should be The urban slum of Kibera in Nairobi, the capital of Kenya, was....

b. Paragraph 1, line 12: all consenting adults 18 years ... should be ... all consenting adults of 18 years

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c. Paragraph 1, line 15: ... WHO STEPS-wise instrument approach... should be .. WHO STEPS-wise approach...

d. Paragraph 2, line 4: ... medical assistants teams should be..... medical assistant teams

e. Paragraph 2, line 10: ..... light clothing and without shoes. Should have the nearest weight measurement accuracy (Eg. to the nearest 0.1 kg or 0.5kg)

f. Paragraph 2, line 12: ... at the level midpoint of the superior border of the iliac crest and the inferior margin of the last rib mid-axillary plane, should read as .... at the level of midpoint between superior border of the iliac crest and the inferior margin of the last rib mid-axillary plane

g. Paragraph 2, line 14:.....recording was at the point of normal expiration. Should be ......recording was at the end of normal expiration

h. Paragraph 3, line 4: indicate the nearest measurement accuracy of BP(Eg. to the nearest 2mmHg)

i. Paragraph 3, line 6: unit for RCBS >11...

j. Paragraph 3, line 8:... should be 5ml...

k. Paragraph 5, line 6:... >/= should be ....# ( use consistently)

l. Paragraph 6, line 3:... remove the space before [5].

m. Paragraph 6, line 8: remove the comma before with 95% CIs

4. Result

a. Paragraph 1, line 4:...... 28.3 % were under 24 years.....should be.... 28.3 % were under 25 years ...

b. Physical activity; paragraph 2, line 4: ... among females. (Table 1) should be ...

among females(Table 1).

c. Waist circumference; line 3:.......in women. (Table 2) should be ......in women (Table 2).

d. WHR; line 7: .... with age (p 0.269). (Tables 2 & 3) should be .... with age (p 0.269)

(Tables 2 & 3).
e. Blood pressure
   a. Paragraph 1, line 2: …. Health worker should be …..health workers
   b. Paragraph 1, line 5: The proportions advised on non-pharmacological
      measures…. Should be The proportions advised nonpharmacological
      measures…..
   c. Paragraph 1, line 6: …. Was... should be replacedby ...were……
   d. Paragraph 1, line 9:...... herbal or traditional remedies for raised BP. Should ne
      ...... herbal or traditional remedies for the treatment of raised BP.
   e. Paragraph 2, line 4:.... (76.2, 77.5)respectively. (Table 2) should be ... (76.2,
      77.5), respectively (Table 2).
   f. Paragraph 3, line 5: The new WHO World Standard population... should be
      The new WHO Standard population
   g. Paragraph 4, line 2: ...(BP> 120/80)... should be ...(BP<120/80)....
   h. Paragraph 4, line 3: ... Hypertension. (Table 5) should be .... Hypertension
      (Table 5).
   i. Paragraph 6, line 3: .... ISH (p 0.042). (Table 7) should be .... ISH (p 0.042)
      (Table 7).

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5. Multivariable
   a. Paragraph 1, line 7: ..... (ß 0.363 females; 0.186 males) should be (ß =0.363
      for females; ß =0.186 for males) (consider consistency)
   b. Paragraph 1, line 9: ....females) (Table 12) should have full stop at the end.
   c. Paragraph 2, line 8: five fold should be fivefold

6. Discussion
   a. Paragraph 4, line 1: One of out every seven hypertensive was... should be
      One out of every seven hypertensive was.....
   b. Paragraph 4, line 2 &3: ...we have reported a, predominantly screen detected,
      age adjusted diabetes...should be ... we have reported age adjusted diabetes ...
   c. Consider the consistency of spacing between paragraphs (Eg. Between 4th
      and 5th paragraphs)
   d. Paragraph 5, line 5: Further.... Should be Furthermore, .....

Discretionary Revision:

1. All your findings are expressed in tables but you can use figures (according
   to the type of data) which can express some data much more clearly than tables
and more attractive.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests: I declare that I have no competing interests

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Declaration of competing interests:

I declare that I have no competing interests