Author's response to reviews

Title: Prevalence and Factors Determining Psychoactive Substance (PAS) use among Hawassa University (HU) Undergraduate Students, Hawassa Ethiopia

Authors:

Andargachew Kassa Biratu (akandkassa@gmail.com)
Fiker Taddesse Seyoume (fiker_taddesse@yahoo.com)
Aweke Yilma Dubi (awekeyilma@gmail.com)

Version: 7 Date: 31 July 2014

Author's response to reviews: see over
PART I: First Response to Reviewer One

Title: Prevalence and Factors Determining Psycho-active Substance (PAS) use among
Hawassa University Undergraduate Students, Hawassa, Ethiopia

Version: 2 Date: 13 June 2014

Reviewer: Stefanie Helmer

Reviewer's report:

Title: Prevalence and Factors Determining Psycho-active Substance (PAS) use among
Hawassa University Undergraduate Students, Hawassa Ethiopia

Date: 13.06.2014

Major Compulsory Revisions:

The manuscript reports the prevalence of psychoactive substance use as well as
determining factors among Ethiopian students based on analysis of cross-sectional
data. The topic is quite compelling and shows high public health relevance. The use of
psychoactive substances among students is a matter of concern. Although much
evidence is available on this subject based on data collected in the United States or
Europe, studies based African countries are limited and thus this research paper
attempts to help fill a gap. However, there are a few comments that are important for the
rounding of the manuscript.

I hope that the authors will find the following suggestions useful as they improve their
paper

Major Compulsory Revisions:

Overall, the measurement section of the manuscript is not explicit enough and the
authors did not address their limitations appropriately.

Answer: Comment accepted. Limitation of the study is further explained (see line # 262-
271)

Furthermore the quality of written English is not good enough and therefore many parts
are not easy to understand.

Comment accepted and the finalized manuscript is given to a volunteer language editor. Thus,
the language edition of the manuscript is already performed by a native English language editor
by Nancy R. Katz, Ph.D (President & Principal Medical writing Consultant) (see line # 290-291)
Overall, there is a lot of information that not necessarily contains in the abstract, such as the use of SPSS. Please replace this with more appropriate information like the conducted analyses.

Comment accepted
Abstract: abstract revised (see line # 27-31)

P.1, 1st paragraph: What do you mean by ‘studied about’?
Language problem already removed

P.1, 3rd paragraph: What is PASU?

PASU is psychoactive substance but Corrected with “PAS” all over the document

P.2, 1st paragraph: As alcohol is included the discussion should sound a little bit less dramatic.
Comment accepted language edited

Introduction:
5) P. 2, 3rd paragraph: Replace abused by used.
Abused replaced by used

Methods:
6) Overall, the emphasis of the methods chapter is placed on the sample calculation. This does not appear to play a major role for the manuscript. In contrast it seems to be important to describe the recruitment of students in more detail as students’ substance use is a very sensitive topic. Where do you distribute the questionnaire? Did the students fill out the questionnaire in front of a teacher? Whether data were not collected anonymously then they students may have perceived that they could be identified. This is an important limitation, given that the subject matter is about illicit drug use and students may be hesitant to report illegal behavior where they can be potentially identified.

Comment accepted: further explanation of the method data collection ways discussed (see line # 87-102)

7) Furthermore, it is of interest how the question and the possible response categories were verbalized. Did you combine categories? Please provide more details on this issues and restructure the methods chapter.

As it appeared on the table four, except all categorical variables (religion, ethnicity) the remaining all were dichotomized. And all those factors found qualified (<0.2) all were taken to multivariate logistic analysis model to be included in the (see line # 131-135)
8) P. 3, 5th paragraph: What do you mean by ‘partly adopted’? Please clarify.

This part totally removed (see line # 113-116)

9) P. 4, 3rd paragraph: Please describe the performed analyses in more detail, i.e. which kind of bivariate analysis was done? How was the dependent variable of the multiple logistic regression coded? Did you include categorical and/or continuous independent variables?

Comment accepted and further explanation and briefing made to detail the type of analysis done(See line # 132-135)

Results:
The number of male participants is remarkably higher than the number of female participants. Can you explain this? Table 1 provides demographic sample characteristics but no comparison is provided for demographic data from the university population as a whole from which the data are drawn or similar universities in Ethiopia. If the data differs from general student population this might be worth to be mentioned.

Number of male students is higher in Hawassa University as it is also same in all other Ethiopian universities. But we took the sample for female student’s proportional to the sampled students and as well the whole University female students. That’s why we used multistage stratified sampling technique (See line # 95-102)

11) P. 4, last paragraph: Students start to drink comparably late in their life (17 years old). How it is thus possible that 60% of students reported that alcohol was their gateway drug?

Comment accepted
Restatement given to make the paragraph more clear (see line # 198-202)

12) P. 5, 1st paragraph: replace ‘gait way drug’ by ‘gateway drug’.

Comment accepted
Correction given throughout the (see line # 202)

13) P. 5, 3rd paragraph: Please add that you are just referring to consequences that were mentioned in the questionnaire.

Comment accepted (see line # 167-168)

14) P. 5, 5th paragraph: The whole paragraph is very difficult to read. Please rewrite and restructure this section.

Comment accepted
the whole paragraph revised to make it clear(line #  172 – 181)

15) P. 5, 5th paragraph: OR = 2.37 - please add the missing decimal place or,
the other way around, delete one decimal place in case of all Ors

Comment accepted
All the ORs readjusted to uniform decimal arrangement. (See line # 172-181)

Discussion:

16) P. 6, 1st paragraph: What does ‘higher’ mean here?

Answer
it is to mean high risk to be exposed to HIV infection as a result of taking risky sexual behavior (causal and unprotected sex) (line # 219-220)

17) P. 6, 3rd paragraph: The section about alcohol use of HU students compared to other students alcohol use behavior is difficult to read. Please restructure. For instance, first is mentioned that the current prevalence is higher among students of Axum university and afterwards the prevalence is lower. Please clarify.

This paragraph totally removed to be more specific as a comment is also given with its table

18) P. 6, 4th paragraph: ‘alarmingly increasing’: The word increasing is misleading in this case. Cross-sectional analyses were performed and no longitudinal or time-trend analysis have been conducted.

Comment accepted and the phrase ‘alarmingly increasing’ erased

19) The limitation chapter is too short. It is very important to address all possible limitation in studies on alcohol and drugs. Please discuss the reliance of self-reported data and possibilities of under- and over-reporting. How do you try to mitigate these inherent problems?

Comment Accepted and further explanation about the limitation of the study given (line # 264-273)

Conclusions:

20) The conclusion contains no additional information, in this section the results are mentioned again. Please add additional information or shorten the conclusion Section. Comment accepted,

The conclusion part is reduced and we tried to summarize our main finding and also recommend (see line # 275-281)

21) It seems that with some restructuring, tables 1 and 2 as well as 5 and 6 could be combined into a single table.
Based on the comment given we removed Table 5, 6, and also all the figures since we wanted to focus on only overall PAS. We limited our table to address our specific objectives only (See table 1, 2, 3, 4)

22) Figures 1 & 2: Both figures do not seem necessary to the body of the article. I suggest to delete the figures.

Comment Accepted figures deleted

General:
23) There were many grammatical mistakes throughout the manuscript. I pointed out a few, but the manuscript would benefit from an extensive revise.

Comment accepted and the finalized manuscript is given to a volunteer language editor. Thus, the language edition of the manuscript is already performed by a native English language editor by Nancy R.Katz, Ph.D (President & Principal Medical writing Consultant) (see line # 290-291)

24) Basic terms are written in different styles such as psycho-active and psychoactive or lifetime and life time. Please unify these terms.

Comment accepted we use the unified one throughout (psychoactive)

25) Furthermore, it is very important that statistical and epidemiological measurements are named consistent (i.e. annual prevalence and current prevalence).

Comment accepted. Definition of operational definition was also considered (see line # 124-130)

26) Used abbreviations should be spelled out (i.e. PSAU).

Comment accepted PASU changed to PAS and for many substances we used consistently PASs throughout the document.

27) Please decide if PAS or PASs is used throughout the manuscript (i.e. p. 2, Paragraph 4).

Comment accepted PASU changed to PAS and for many substances we used consistently PASs throughout the document.

28) In part, the linguistic usage is a bit too sensational such as ‘killer communicable diseases’ or ‘young adults, the hope of tomorrow’.

Comment accepted. Such explanation deleted, further language edition done by native English speaker

29) Please be consistent in decimal places (X.X% or X.XX%).

Comment accepted and we have tried to make X.X % throughout the document

Minor Essential Revisions:

Introduction:
1) A structure of the introduction according to the structure of the analysis may improve readability.
Structural modification was tried to the introductory part

Methods:
2) The abbreviation SNNPR is not used again throughout the manuscript. Therefore, the abbreviation could be deleted.

Comment accepted and the abbreviation SNNPR deleted

Results:
3) The heading is written in capital letters. Please uniform.

Comment accepted
The Result title with small letter in uniform way with the other (See line # 1430)

Tables:
4) In addition to the description in the results section tables 2, 3 and 4 are not absolutely relevant.
We removed all tables which are not in line with the purpose of the study. Since table to is the one which shows the magnitude of PAS use by the students, which is one of our objective. We selectively modified the table to have only information about over all PAS use. We hope that the remaining tables are important to display our finding

Level of interest: An article whose findings are important to those with closely related research interests
Quality of written English: Not suitable for publication unless extensively edited
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

PART II: Second Response to Reviewer One

Title: Prevalence and Factors Determining Psycho-active Substance (PAS) use among Hawassa University Undergraduate Students, Hawassa, Ethiopia

Version: 2 Date: 11 June 2014

Reviewer: Marie-Pierre Tavolacci

Reviewer's report:
- The authors used a WHO model students substance use core questionnaire to collect information on the use of different PASs: it is well to use a standardized questionnaire.

**Major compulsory revisions**

**Introduction**

The first sentence need references: « Psycho Active Substance (PAS) use is becoming well known for compromising the health status and also claiming the death of millions' life every year ».

**Answer:** restated and references given as (see line # 48 & 49)
- The aim of the study was to establish prevalence of PASs and their determinants among undergraduate students of Hawassa University. A recent study published in BMC Public Health (Ref 6) was about the same topic: « Psychoactive substances use and associated factors among Axum university students, Axum Town, North Ethiopia »: what are the differences with the study of the authors?

**Answer:** These studies actually address similar objectives. But the difference is the area where they are located. Axum University is found at the northern border of the country where as Hawassa University is located at the Southern Part of Ethiopia. (Both are located in different states). The other difference is that we used WHO model core questionnaire which is used most preferable for international comparison of findings.

Substances like alcohol and khat were reported to be abused by 84% and 54% of students of one Kenya private university respectively [6-8] but Reference 6 referred to a study in Ethiopia and Ref 7 in Nigeria.

**Comment accepted and mistake corrected (see line # 60 and 61)**

- Reference about the death caused by PAS should be more recent than Reference 2 (2003)

**Comment accepted: additional references are given (see line # 48 & 49)**

- Substances like alcohol and khat were reported to be abused by 84% and 54% of students of one Kenya private university respectively [6-8] but Reference 6 refered to a study in Ethiopia and Ref 7 in Nigeria.

**Comment accepted and independent citation given for each country (see line # 59-66)**

**Methods**
- The authors did not indicate the precision they chose to calculate the sample Size: The sample size needed in surveys depends upon the precision of
Estimates desired.

Answer:
Our precision is mentioned in another phrase that is “5% margin of error” or 0.05% (line # 93)

-The authors used 22% as prevalence of substance use but is it a lifetime or a Current use?

Answer:
It’s for the past 12 Month. In one of the Unpublished study conducted at Mekele University of Ethiopia, we found a life time prevalence of overall PAS use to be 82.7. But we selected Addis Ababa university students (22.0). Preferring to slightly increase the sample size (see line # 91)

Definitions used by the authors were : « Lifetime substance use in this study refers to respondents who admitted to having ever used at least one of the substances listed in the questionnaire. » « ‘Current prevalence’ denotes proportion of students who used substance within 30 days preceding the study. » However in the tables of results we found also the consumption in the past 12 months that it was not indicate in the methods.

Answer:
Comment accepted

And additional operational definition also added to define Prevalence of PAS use within the past 12 months Operational definition is added and edited (see line # 125-130)

« Bivariate analysis was done and variables with p-value less than 0.05 were Included in the multiple logistic regression analysis »: it is usually include p-value Less than 0.20 in the logistic regression

Comment Accepted:

We did the analysis again and took those factors affecting PAS use with p-value < 0. 2 (see line # 134) to be included in the final multiple logistic regression analysis. And fortunately another Factor affecting students PAS use in the past 12 month was found. This is “living alone during School age”. We also changed the table and (See table-4) or line # 426-430)

Results
-The authors have to standardize the presentation of numbers in the results: either 0, 1, 2 or 3 numbers after the point were presented in the text or in tables.
Comment Accepted
Correction made throughout
Few sentences were redundant with results in table 5 « Those students who Reported that their family use PAS were more likely to use PASU in the past year as compared to those students whose family didn’t use PAS (adjusted OR = 2.745, 95% CI = 1.678-4.490)

Comment accepted

See table 4

-The table 1 was not clear and some results were wrong: for example:
  • Age 20-24 total : 468/586 = 79.8% and not 69.2% as indicated ;
  • 419 total of male for the age (total male was 479) ;
  • 81.43% proportion of male (for th 3 last categories) : it was 81.7% ;

Comments accepted:
All computational errors corrected (see table 1)

• No percentage were indicated for the total of father’s educational level
Comments accepted:
Missed information added (see Table 1)

• In the table 2, why the total exceeded 100% (abuses PAS) or were inferior to 100% (drunk alcohol) ?

Comment accepted and it was corrected. But, as per the comment given by another reviewer, we removed the information about khat and alcohol as it to be more specific in this manuscript and preparation of another manuscript may be considered

-Why were not all the items presented in the table 5 as in the table 6?
Comment Accepted

But we removed table-6 due to the reason stated above

Discussion

-Male students are a large proportion of the students (81.7%), is it reprehensive of the students or is it sure estimate?

Answer
It is representative. The proportion of female students attending Hawassa University and as well all other Ethiopian universities are lesser compared with male students

There were too many results in the discussion: only the main results must be presented and discussed

Comment accepted
We have tried to focus only prevalence and overall PAS use and result and discussion part about khat and alcohol, including tables all removed from this manuscript.

Authors argued « This deference may be linked to the study time differences, Culture » but the study was conducted in 2011 and the reference 6 is a study Conducted in Ethiopia and in 2012, then in the same country and only one year after the study of the authors.

Comment accepted
In order to further explain more. Of course we believe that it may be logical to consider time difference as a possible factor to explain the case. But we have tried to incite more references in addition to the previously mentioned article (see line # 182-193).

Minor essential revisions
- « Revelin » was first cited in the BMJ in 2000 by Plant M (before Reference 15).

As it has been used as a validity check in students core questionnaire, we preferred to incite WHO students substance questionnaire but (line # 101, 111, 112, & 349-3510)

- Presentation of the references must to be reviewed: Initial of the First name is required and not the whole first name

Comment accepted and corrected
We have tried to rearrange it throughout all reference (see line #308-385)

Level of interest: An article of limited interest
Quality of written English: Acceptable
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