Reviewer's report

Title: Comparing antibiotic self-medication in two socio-economic groups in Guatemala City: a cross-sectional study

Version: 3 Date: 26 November 2014

Reviewer: Tadele Eticha

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Major Compulsory Revisions

1. Abstract: Methods – “We used a questionnaire to gather information about frequency of self-medication, symptoms that provoked self-medication, with which antibiotics patients self-medicated, and who they went to for advice about self-medicating…” This refers to a composition of the questionnaire. It is better to clearly explain the basic methodology (study setting, design, study population, etc) used without going into excessive detail.

2. Abstract: Results – the authors mentioned the socio-demographic characteristics of the study participants. However, prevalence of antibiotic self-medication and factors associated with it, reasons and source for self-medication, etc need to be mentioned.

3. The authors directly compared the socio-demographic characteristics of the study participants of the two areas. However, it is extremely important to perform a further statistical analysis first to identify factors associated with antibiotic self-medication separately and then compare the results of the two areas.

4. In Tables 1 & 3 – Most of the percentages are not correct (for example, for the age group 20-29 in City Center: 77/197 = 39% but in table 35%; married: 88/197 = 44.7% but in table 40%).

5. The discussion and conclusion need to be improved based on the further statistical analysis will be performed rather than comparing percentages.

6. As limitations of the study, what about sample size and the nature of study design? The sample size of each area is too small to detect important associations between socio-demographic factors and antibiotic self-medication. A cross-sectional study was employed in this study, which might suffer from temporal relationship establishment with some variables and could not provide much more substantial evidence of causality.

Minor Essential Revisions

1. The writing would benefit from thorough editing and review for grammatical errors.

2. Lines 113 & 114: The authors say “In contrast, men have shown to self-medicate more frequently than women in Nepal, Syria, and the United Arab Emirates.” They need to provide a reference for this statement.
Discretionary Revisions

1. The title might be changed to “Antibiotic self-medication practices in two disparate socio-economic communities in Guatemala City” to focus on the prevalence rates and factors associated with antibiotic self-medication since these are very crucial to increase awareness about the negative consequences of antibiotic misuse among the general population, encourage pharmacy professionals in controlling the problem of irrational antibiotic use by involving in giving education to their clients about the drugs for self-medication and the hazards associated with self-medication with antibiotics, and for the regulatory bodies to enforce antibiotic policies and then to take measures such as strict prescription policy.

**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:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests.