

# Review of: "An Analysis of Pharmaceutical Inventory Management at a Leading Teaching and Referral Hospital in Kenya"

Laura Calle-Miguel<sup>1</sup>

<sup>1</sup> Hospital Universitario Central de Asturias

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I congratulate authors for this interesting manuscript. I propose some comments and questions:

- Abstract. It lacks the methodology section. Authors should mention they did a morbidity analysis, as I find it is an important issue in the study. Conclusions: Do Category I pharmaceuticals require special attention for control according to this study or it is a general recommendation? Do authors have other conclusions in relation to this study?

- Introduction is correct. It explains methods of measuring and controlling essential medicines in developing countries.

- Methodology.

- Were data collected from hospital expenditures (purchase) or from pharmacy stores?
- In the article, there is also a morbidity analysis with the percentage of drug expenditure for each group of pathologies that should be better explained in the methodology.

- Results:

- The sentence "Figure 1 shows the annual pharmaceutical expenditure at JOOTRH over the study period" is not correct. It reflects the annual percentage of total expenditure. This figure does not give important information and could be suppressed, as it is already explained in the text and there is a big number of tables and figures.
- The sentence "Table 1. Summary of the drugs that consume the total pharmaceutical expenditure at JOOTRH over the study period" is not correct as it represents the 53.09% of the total expenditure. Drugs are separated according to the formulation, so the active principle can be repeated and, thus, the real and global consumption of each drug it is not reflected. Furthermore, intravenous solutions and combinations of drugs are expressed in the same level.
- In the Figure 2, codes of the figure do not correspond to those explained in the legends, and there are two of them that are not explained in the legends. Furthermore, not all the number are perfectly visible.
- Figures and tables are mentioned several times along the text. Information in tables are repeated thoroughly along the text, especially in tables 2, 3, 4 and figure 4.
- I think that it is more useful global information from the 3 years in the ABC, VEN and ABC-VEN analyses

- Discussion

- In general, I find authors give a lot of information in comparisons between other similar studies but it lacks their opinions and conclusions about these data.
  - In the ABC analyses, comparisons should be done in relation to the global expenditure used in each category, not in relation to the percentage of each category because that is part of the ABC system definition. Are really the results of the study comparable to other studies?
  - In the ABC-VEN matrix analysis, other studies show between 1-2.7% of TPE in drugs of Category III while, in the present study, the PTE for this category reached 5.1%. How can authors explain this?
  - Authors emphasizes analyses along the 3 years of the study but they do not give any conclusions about the annual trend
- Limitations: some limitations of the study are not explained in the correct paragraph.
- Final conclusion. Authors should think thoroughly about their final conclusion among all this useful information. Is the distribution of the pharmaceutical expenditure appropriate in a hospital of its characteristics and in accordance to the pathologies? How useful can a pharmaceutical inventory be in a hospital in a developing country?