



SDI Review Form 1.6

Journal Name:	Cardiology and Angiology: An International Journal
Manuscript Number:	Ms_CA_22792
Title of the Manuscript:	About physical bases of heart acting. Case of healthy women in Democratic Republic of Congo
Type of the Article	Original research papers

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<u>Compulsory</u> REVISION comments	This study aimed to deal with the physical basis of the heart and improve the diagnosis of sick people, but it was unclear for the following reasons: - Dealing with physical bases of the heart is something quite broad. Authors should better define the content. - Sick people is also well general and the authors need to show these objectives which aim to monitor and not diagnose. - It was unclear whether the goal is to study the mechanics of healthy hearts or sick hearts and methodology has been proposed to monitor blood pressure in healthy women. I strongly question the methodology proposed with evaluation of non-invasive blood pressure by sphygmomanometers method is capable of supporting the hypothesis proposed. Furthermore, assume that the stroke volume for all individuals is 80mL and treat systemic blood pressure having a linear relationship with afterload does not seem a good model. This modelling ignores the Frank-Starling mechanism. Thanks to this mechanism, regardless of blood pressure load to a reasonable limit, outside observed in this study, the major factor that determines the amount of blood that is ejected is still the amount of blood entering the heart. Introduction brings the theory of cardiac cycle and does not refer the problems to be addressed. It was not explicit if the study was approved by the	We have taken into account your preoccupations in rewriting the paper.



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	Committee of Ethics or responsible organ. The authors mention in the methods they have acquired a thousand women data, divides them into age groups and does not describe the n of each age group. The blood pressure data does not have standard deviation and other data such as weight, size, age, sex (were not only women?), temperature, basic food were not recorded in the results. Tables show estimated/calculated data with several values of heart rate. Where is measured data and its application in the Kunyima equation? The conclusion is inconsistent with the proposed objectives. The authors did not apply the tool to the patients in the present study. I believe that the authors can not conclude that such an analysis tool can help diagnose patients with heart failure. The work does not present statistical analysis.	Thanks for your remarks. We have taken into account your preoccupations in rewriting the paper.
<u>Minor</u> REVISION comments	Figures and tables do not have legends. The tables are non-standard. Should not present grids. Line 6: "The hypertension is probably the most important public health problem in our country." Authors should search in which placement is arterial hypertension in the country, avoiding "probably". The tables with the estimatives data are on Methods and should be on Results.	One figure has not the legend (it is done now) It is a serious problem really in the country It is done.
<u>Optional/General</u> comments		Thanks for the remarks. We have taken them into account. See the reviewed paper.