Reviewer's report

Title: Quality of life and organ damage are intimately related to activity limitations in patients with systemic lupus erythematosus

Version: 1 Date: 20 October 2014

Reviewer: Maha Maha El Gaafary

Reviewer's report:

Major Compulsory Revisions
1. The aim is not specific. The term "organ damage" was not cited at all in the objective though it is the main theme of the work.
2. It is a cross sectional study design not a cohort-prospective.
3. Validity parameters of all the study tools should be mentioned in terms of sensitivity, specificity and others. HAQ should be re-validated in SLE.
4. Case definition of organ damage should be clearly stated and how it is measured. I realized that SDI is the indicator of organ damage?
5. More description of the QoL and Well Being tools should added.
6. Is the presence of hematologic disorder protective against limited activities? If so, it should not be written that way and other risks for limited activities should be searched for and declared. It is arthritis that was not present in this group of hematologically affected SLE patients that made them unlikely to have limited activities.
7. I m not sure that these are novel findings. (Discussion statement)
8. This study does not have the statistical power to identify the type of damage associated with impaired HAQ. This is true though it was set as an objective. (Discussion statement)
9. I ld love to see a diagram showing the distribution of organ damage either single or combined for each of the 4 major organ damages: skin, renal, arthritis and hematologic. And then describe the HAQ and other parameter among these subgroups. (Results)
10. It is better to associate mean with standard deviation beside the range, otherwise median should be coupled with interquartile range.

Discretionary Revisions:
1. Selection of non-scientific term "formidable" better to use "a good opportunity". (Introduction)
2. "Despite that more than 60% of the patients with SLE have either periodically or permanently reduced ability to perform daily activities, it has to our knowledge not been studied whether activity limitations and disease manifestations are related or not." "to our knowledge" should be intercalated between dashes.
3. Thus, herein the study population was divided into different disease phenotypes based on the 1982 American College of Rheumatology (ACR) classification criteria (i.e. skin disease, arthritis, renal or hematologic disorders). This sentence should be cited in the methodology section. (Introduction)

4. Numbers at the beginning of a paragraph should be written in letters. (Methods)

5. Study population should be briefly described not referred to. Any specific criteria regarding this population in particular? (Methods)

6. Crithidia luciliae microscopy testing should be referred to. (Methods)

7. How rehabilitation interventions can be generated from the present results? It needs some explanations. (Discussion)

8. More in-depth analysis of organ damage could generate new findings. (Discussion)

9. Table 1 again disease duration and medications are classified as demographic variables though they are not. (Results)

10. P values of the logistic regression in table 2 are all missed.

11. Titles of tables should be set in a more clear manner. For example table 3: Factors predicting impaired high scores of HAQ among patients with elevated HAQ (Multiple Linear Regression Analysis)

12. The added graph did not imply any new information and is hard to interpret.

**Level of interest:** An article of limited interest

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

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

None