Reviewer’s report

Title: The anti-inflammatory and antioxidant activity of 25 plant species used traditionally to treat pain in southern African

Version: 2 Date: 3 January 2015

Reviewer: Sandra Mendoza

Reviewer’s report:

The manuscript involves the preliminary phytochemical and anti-inflammatory evaluation survey of 25 medicinal African plants as well as the antioxidant and anti-inflammatory studies of three of them. The results presented by the authors have enough importance to be published in the BMC Complementary and Alternative Medicine. However, a revision with major changes should be taken into account previous to its publication.

Comments

Methods
Page 5. Line 141
“30 mL of 70% acetone” The other solvent is missing

Page 6. Line 155
A parenthesis is missing

Page 10
It is not clear the criteria for selecting C. anisata, P. africanum and Z. capense to continue the biological activity studies after the analysis of the total phenolic and flavonoid content. From Figure 2 it can be inferred that the criterion was that the extracts of these three plants observed the best 15-LOX inhibitory activities. Therefore the discussion of these experiments has to be done previously to the discussion of the antioxidant activities.

Although Table 3 shows the inhibitory activities of the three selected extracts on the LPS-activated NO production in RAW macrophages, the results are not discussed.

Page 19
The legend of Figure 1 must be corrected. The results and discussion must be deleted from the legend and added to the corresponding section. From the main body of the figure delete the title and correct phenolic

Page 20
Figure 2; from the main body of the figure delete the title and text “plant species
and quercetin control”
Page 21
Re-write the legend of Table 1.
Page 22
Table 2. Write the names of the plants in italics and indicate if the value corresponded to the mean and the standard deviation or standard error
Page 23
Table 3, column 3; delete the last significant figure of the standard deviation or error

Level of interest: An article of importance in its field
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