

(1) The “Author Contributions” section is missing. Please provide the author contributions

The " Author Contributions " section has been added.

Author contributions: Ailing Ding analyzed the data and wrote the manuscript. Ailing Ding, Hong Hu and Xudong Dong designed the research study. Ailing Ding and Hong Hu, Fanping Xu performed the research. Ailing Ding, Hong Hu, Fanping Xu, Lingyan Liu and Juan Peng collects samples. Xudong Dong contributed project support and technical guidance. All authors have read and approve the final manuscript.

(2) The authors did not provide the approved grant application form(s). Please upload the approved grant application form(s) or funding agency copy of any approval document(s)

The manuscripts involved a total of four fund projects, including Yunnan Provincial Health Commission Senior Talents Project (No. L-2018006 doesn't either. H-2018045) and Yunnan Academician Expert Workstation (No. :202005AF150033). For these three fund projects, only the approval notice documents are available, and the project application task book with official seal has not been issued yet. In addition, the approval document of the International Science and Technology Cooperation Key Research and Development Program (2017IB004) has been uploaded.

(3) The authors did not provide original pictures. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor

The original image has been reuploaded with PowerPoint.

(4) PMID and DOI numbers are missing in the reference list. Please provide the PubMed numbers and DOI citation numbers to the reference list and list

all authors of the references. Please revise throughout

References have been revised, see manuscript

(5) The “Article Highlights” section is missing. Please add the “Article Highlights” section at the end of the main text

The "article highlights" section has been added, which reads as follows:

The basic information of 72 pregnant women and newborns was analyzed. Pair samples of pregnant women's blood, placental blood and umbilical cord blood were collected immediately after delivery. The content of nickel in the matched samples was determined by electron coupled plasma mass spectrometry (ICP-MS). According to the results, we found that the placenta weakened the barrier to nickel in the maternal-fetal system of women with pregnancy complications, affecting the healthy growth of the fetus in utero.

(6) The authors need to fill out the STROBE checklist with page numbers.

Strobe checklists have been written and page numbered as required