Reviewer's report

Title: Fetal gender and perinatal outcomes in Mainland China

Version: 2 Date: 5 June 2014

Reviewer: Bo Sun

Reviewer's report:

This report is a retrospective, multicenter survey of all singleton deliveries in order to present gender related delivery outcome in Chinese population specified from level II and II obstetrics. The data should have reflected contemporary maternal and infant health care issues in the context of global campaign to reduce neonatal mortality as well as improvement of maternal health care in delivery. It also addresses an local issue in China regarding gender bias. Whiles the manuscript do have some solid data documenting the delivery status of the focused issues, there are other problems regarding the concept and presentation of the data and its implications

Major:
1. Purpose of the study should be more focused on a scientific question, such as whether gender bias reflects a clinical procedural and technical issue, or an accompanied problem of socioeconomic, ethical or cultural obstacles?

2. Representative of the data, any generalizability of the data to the worldwide perspective, and why the authors refer to Western country data for comparison, not to the countries where socioeconomic, cultural are more relevant, such as in Asian countries?

3. What level of obstetric practice, or standard of care, these centers represent with regard to international and domestic situation and development characteristics?

Specific:
Title: To make it more informative, the title should include what major outcome you have encountered, and mainland is not necessarily needed. As the study was from a survey of many level II and III hospitals, this may be added to define the data source as well.

Introduction
There must be some domestic and/or international reports regarding fetal gender and clinical outcome of the newborns, and the authors should have a through search of the literature. Based on it, authors may further consider what this study aim really was, e.g., to explore correlation of perinatal risks and gender with neonatal and maternal outcome. For general trend of fetal gender and neonatal outcome, it not be generalizable as the data was not complete birth population based.
Page 4, line 81, gatekeeper should be triage; line 82, it is arbitrary to say no delivery was from primary care service in the regions these participating hospitals are located. If it is the case, please provide evidence concerning each regional complete birth numbers compared with total sum of the deliveries from level II and III hospitals of respective region (municipalities and medium-sized cities, I assume). The "entire population" should be defined in terms of time duration and geographic region.

Page 4, line 83, why only singleton delivery was considered? and why not include those survived but below 28 weeks, is 28 weeks inclusive or exclusive, how was the 28 weeks GA determined and defined in these clinics?

Page 5, line 91, what means "there were no data after hospital discharge"? Does your assessment of outcome include those of withdrawal from existing treatment? Line 100, for oligohydramnios, is there any limit at specified GA period, e.g. postterm also included?

Page 7, line 152, than that that, type error. Also page 10, line 203.

Page 8, line 1, what was “controlling for birth weight” adjustment?

Page 8, line 166, what was the definition and clinical practice regarding diagnosis of severe asphyxia; line 168, what means “controlling for variables that have significant association”?

References 4, 27, 30, misspelling of authors’ name, use small letter.

Tables
To keep only one decimal should be enough for some variables, such as BW. Use Tab key to make column left aligned. Have a space between a number and parenthesis. Delete any inserted Excel format embedded.

Table 2, PROM, P should be premature, not preterm, this is missing in abbreviations.

Table 4, it is very weird that none of the males was in postterm whereas in BW >4,000 the males were significantly more than the females. These should be verified by their GA calculation compared to the females. Otherwise the reliability of the original data is questionable.

Again, what determined severe asphyxia?

What are those defined as neonatal death, would it include those withdrawal from NICU? or even not admitted to NICU but died? The neonatal death should be given in numbers per 1,000 (live births of the cohort), or with 2 decimals in percentage.

Table 5, is there any significance in crude and adjusted OR?

May the authors make comparison between those of maternal requested CS versus those of non-maternal requested to analyze the impact of prenatal risks.
from maternal and fetal aspect to the neonatal (perhaps also maternal) outcome to strength one of the major risks regarding gender bias.