

ADVANCED MATERNAL AGE AND ADVERSE PERINATAL OUTCOME: A CALL FOR INVESTIGATIONS ON ASIAN WOMEN

There has been an increasing trend among women in the industrialized world to delay childbearing during the last three decades [1]. At the same time, the proportion of women delivering at the age of 35 years or older has also increased. Although the association between advanced maternal age and risk for fetal chromosomal abnormalities and decreased fecundity has been well documented, investigations on the influence of advanced maternal age on perinatal outcome showed conflicting results. Some studies found that pregnant women aged 35 years or older carry an increased risk for stillbirth, neonatal death, low birth weight and preterm delivery. Other studies, however, challenge these findings [2].

Most previous studies evaluated birth certificate information that were often incomplete and subject to misclassification and informational errors. Furthermore, prior studies mainly investigated European and American populations. It is not clear whether women in Asia or other parts of the world show a similar trend in delaying childbearing, and whether they are at increased risk for adverse pregnancy outcomes if they deliver at 35 years of age or older.

In this issue of the *Taiwanese Journal of Obstetrics and Gynecology*, Jahromi and Hussein [3] from Iran presented a case-control study to compare the pregnancy outcome of women aged 40 years and older with those at 20–30 years of age. The authors found that the prevalence of gestational hypertensive diseases, placental abruption, preterm birth, cesarean delivery and a low Apgar score at 5 minutes of age was significantly higher in women aged 40 years or older than the control group. This finding confirms recent studies on Asian women with advancing age [4–6]. They also found that preterm birth and low birth weight (<2,500 g) happened more frequently in primiparous older women, while preeclampsia and placental abruption happened more frequently among multiparous older women. From my point of view, this is an interesting finding. But regrettably, the authors did not address this point in their discussion. Nevertheless, as the number of advanced-maternal-age gravidas continues to grow, obstetric care providers would benefit from the article

by Jahromi and Hussein to enhance their preconceptional and antenatal counseling.

The study by Jahromi and Hussein has several limitations that warrant attention. First, it had the attendant limitations of a hospital-based study. There was a risk of bias due to patient selection. Second, it failed to control for important confounders, such as prepregnancy body mass index, educational level, marital status, prior obstetric history, use of assisted reproductive technology and coexisting pregnancy complications, in the analysis. It has been suggested that the increased occurrence of adverse pregnancy outcomes in older women is attributed to the increased frequency of prepregnancy illness or coexisting pregnancy complications observed in these women. Third, women aged between 20 and 30 years served as the control group in the study. However, women who deliver at 35 years or older are nowadays considered to be of advanced maternal age. Therefore, it will be more appropriate to include women aged between 20 and 34 years in the control group. Fourth, the indications for cesarean delivery were not clearly presented in the study. Finally, the authors did not take into account the possibility that the women may have delivered more than once during the study period. This may have caused inappropriate weighting of certain characteristics by including some women more than once.

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Perinatal Outcome According to Maternal Age, Adjusted for Nulliparity, Married/Cohabitation, Significant Malformations, Smoking, Maternal Disease, and Multiple Pregnancy. Table 6: Peripartum Information According to Maternal Age, Adjusted for Nulliparity, Married/Cohabitation, Significant Malformations, Smoking, Maternal Disease, and Multiple Pregnancy. The proportion of women giving birth between ages 40 and 44 years and at 45 years or older has increased during the study period (Fig. 1, A and B). During the study period (1987–2001), the number of women giving birth between ages 40 and 44 years increased from 6 to 10 live births per 1,000 women.