Ante-partum bleeding: Is determination of its risk factors clinically significant?

Sir,

I read the article, “Prevalence and associated risk factors of ante-partum hemorrhage (APH) among Arab women in an economically fast growing society” by Bener et al. The authors concluded that poor education and family histories of G6PD deficiency and Down syndrome were risks of APH; however, they did not mention whether or not these risk factors of APH hold true also to disorders causing APH. Putting the conclusion first, the identification of risk factors of symptoms may assist the caregivers to identify patients that require closer observations; however, this may not be true for all clinical entities. In line with this, I have two concerns.

First, identification of risk factors of APH may be of little clinical significance. In contrast, identification of risk factors of disorders causing APH is clinically useful, especially when their identification may prevent or reduce morbidity. Bener et al. state that APH was mainly caused by placenta previa, placental abruption, uterine rupture, and unknown etiology. Many studies, attempting to determine risk factors of these disorders, provided clinically useful data. For example, primiparity, hypertension, and intrauterine infection were confirmed to be risk factors for abortion, and thus obstetricians become cautious in dealing with such women. Studies on APH of unknown etiology established new clinical entities such as chronic abruption oligohydramnios sequence or chronic placental thrombohematoma.

I do not claim that identification of risk factors of some obstetric symptoms, and not the disorder causing them, is always unimportant. For example, identification of risk factors of postpartum hemorrhage (PPH) is important. PPH is caused by various disorders. Irrespective of its causal conditions, PPH fundamentally requires almost uniform treatment: Administration of uterotonic agents, then uterine compression sutures or uterine balloon tamponade, and finally trans-arterial embolization or hysterectomy. Identification of risk factors of PPH allows caregivers to directly prepare for these treatments. Thus, identification of risk factors of not only the “disorder,” but also “symptoms” is important as far as PPH is concerned. Of course, identification of risk factors of APH may also assist the caregivers to identify patients that require closer observation. However, treatment of APH is more variable than that of PPH depending on disorders causing APH. Thus, identification of risk factors of APH may be less significant than that of PPH.

Second, although Bener et al. made important observations that a family history of G6PD deficiency or Down syndrome is a risk factor of APH, they did not mention whether these two conditions of the pregnant women themselves also becomes its risk factors. If so, I am wondering what disorder becomes risk factors for them? The authors described a high incidence of Down syndrome in this community; which, however, may not explain this relationship. Elevated homocysteinemia, which may underlie both abruption and Down syndrome, may be a possible culprit of this phenomenon. The association of APH and these two disorders indicates some hidden biological message. Identification of the relationship between these risk factors (D6PD deficiency or Down syndrome) and disorders may have helped unveil such hidden message.

I am wondering whether an economically fast growing society had some specific findings for APH, as the title suggests. Did APH decrease with economical growth? I am wondering what disorder did and what disorder did not? Such data would have been useful in economically growing societies other than Qatar, greatly enhancing the significance of this study. My viewpoint is based on clinical obstetrics and not epidemiology. Thus, I am not confident whether these data are epidemiologically significant.

Shigeki Matsubara
Department of Obstetrics and Gynecology, Jichi Medical University, Tochigi, Japan

Address for correspondence: Prof. Shigeki Matsubara, Department of Obstetrics and Gynecology, Jichi Medical University, 3311-1, Shimotsuke, Tochigi, 329-0049, Japan. E-mail: matsuhi@jichi.ac.jp

References