I read with interest the recent paper by Saftlas et al. (1) on abortion, changed paternity, and risk of preeclampsia in nulliparous women. In a paper from our group (2) that was referred to in their Discussion, we did not find any effect of change in paternity on preeclampsia in the second birth after adjustment for the interpregnancy interval, as it is correctly pointed out. However, Saftlas et al. state that we did not take abortion history into consideration, which, in the case of our paper, is not entirely true. We had only registry information on abortions, spontaneous or induced, and we checked whether considering in the analysis abortions occurring between the first and second birth changed our estimates. This is reported in the Results section (2, p. 627). Admittedly, our information on abortions might not have been of the best possible quality and we did not know the exact time of abortion, but we did not find any evidence that a history of one previous abortion (spontaneous or induced) was protective of preeclampsia, and adjusting for history of abortion did not change our estimates.

REFERENCES

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THREE AUTHORS REPLY

We thank Dr. Basso for clarifying that her study of paternal change, interbirth interval, and risk of preeclampsia in multiparous women did consider the effect of registered abortions between the first and second births but failed to find a protective effect (1, 2).

It is important to note key differences between our study (3) and those like Dr. Basso’s, which have relied on registry data from Denmark (2) and Norway (4, 5). The Calcium for Preeclampsia Prevention (CPEP) Study conducted prospective surveillance of nulliparous women for the development of preeclampsia, defined according to standardized criteria (6). In contrast, the Danish and Norwegian studies analyzed changed paternity among multiparous women, and the complex diagnosis of preeclampsia relied on hospital discharge codes covering 15- and 32-year periods, respectively. Unfortunately, despite their large numbers of subjects, registry-based studies are vulnerable to residual confounding by important risk factors for preeclampsia, such as body mass index, which are not recorded in the registry data. Although smoking during pregnancy was considered in the study by Basso et al. (2), the Norwegian studies (4, 5) did not, although it is inversely related to preeclampsia risk.

Because women who change partners are likely to have longer intervals between births, future studies should attempt to ascertain all induced and spontaneous abortions, including those preceding the first birth. In addition, data on paternity, conception date, and gestational age at termination should be collected. Women in unstable relationships are more likely to obtain induced abortions than women in stable unions (7). Therefore, studies that fail to consider abortion type, paternity, and timing of abortive outcomes in their analyses are subject to possible bias from confounding, and they are more apt to attribute erroneously long interpregnancy intervals to women who change partners.

REFERENCES

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