The effect of previous pregnancy outcome on perinatal results

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Objective
The aim of the study is to determine the impact of previous pregnancies and births on perinatal risk in subsequent pregnancy.

Methods
A total of 25063 women were included in the study, all of whom had low risk singleton pregnancies and delivered in St. Sophia Hospital in Warsaw between the years 2010 and 2016. A retrospective analysis was performed to estimate the influence of number of previous pregnancies and vaginal deliveries on the incidence of compiled adverse pregnancy outcome; macrosomia, hypotrophy, polyhydramnios, oligohydramnios, fetal distress, labour dystocia, oxytocin augmentation, obstetric haemorrhage, third or fourth degree perineal tear, placental abruption, placenta praevia, unplanned Cesarean section, premature birth, operative vaginal delivery.

Results
In a low-risk population the risk of adverse pregnancy outcome increases with each pregnancy (OR 1.082; 95% CI 1.029-1.138) but decreases with each non-operative delivery (OR 0.518; 95% CI 0.484-0.554).

Conclusion
History of successful vaginal delivery significantly reduces the risk of adverse perinatal outcome in subsequent pregnancy. It can be also concluded that even a single previous miscarriage is a potential risk factor for adverse perinatal outcome.