Introduction An increase in methamphetamine (MA) consumption has been observed in Saxony (Federal Republic of Germany). So far there is no data available in German-speaking countries about the risk of MA consumption in pregnancy or delivery.

Methods The data from all pregnant women who were examined or delivered at the Clinic for Obstetrics and Gynaecology between 2010–2015 were retrospectively searched for MA consumption. One hundred nineteen pregnancies with 113 deliveries of 115 women consuming MA could be evaluated. Eighty eight women admitted to consumption according to the history, 28 women denied it, and there was no information available in the records of 3 cases. One hundred thirteen women agreed to a blood test for MA and 93 cases were positive (28 of which indicated low-dose consumption). The statistical analysis was performed by the Institute for Medical Informatics and Biometry. The data derived from the quality control report, Evaluation of Obstetrics 2015 in Saxony, was used as a control group.

Results MA-consumers are significantly younger, without a permanent relationship, without a job and have a low education level. The first detection of the pregnancy was late and the number of performed routine examinations including ultrasound assessment was lower compared to the controls. 7 women had no routine examination. The number of premature contractions, cervical insufficiency and gestational diabetes were significantly higher. The number of patients needing tocolysis, antenatal glucocorticoid treatment to prevent neonatal respiratory distress syndrome, or in-patient care was significantly higher in patients consuming MA. Instances of amniotic infection syndrome and premature rupture of membranes were higher. The rate of intrauterine fetal death was 3.5%, which was much higher than the rate of control group (0.2%).

Discussion MA consumers are significantly younger, without a permanent relationship, unemployed, and have a low education level. Pregnancy was initially detected late and the number of routine examinations performed including ultrasound assessment was lower compared to the controls. Seven women had no routine examination. The number of cases of premature contractions, cervical insufficiency and gestational diabetes was significantly higher. The number of patients needing tocolysis, antenatal glucocorticoid treatment to prevent neonatal respiratory distress syndrome, or in-patient care was significantly higher in patients consuming MA. Instances of amniotic infection syndrome and premature rupture of membranes were higher. The rate of intrauterine fetal death was 3.5%, which was much higher than the rate of control group (0.2%).

MA consumption increases the risk for mother and child significantly during pregnancy and delivery (pregnancy complications, premature delivery, increased rate of abortion, intrauterine death). Special attention must be paid to young pregnant, non-working women without a partner who do have routine examinations or start having them late.