

[EP16.40] Maternal stress, well-being and childbirth experience: data from PE37 a randomized clinical trial on pre-eclampsia screening in the third trimester

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Objective

To determine whether universal screening for term preeclampsia using the sFlt-1/PIGF ratio at 35–37 weeks' gestation, followed by planned delivery from 37 weeks onward, increases maternal anxiety and adversely affects postpartum childbirth experience.

Methods

Within an open-label randomized controlled trial (PE37), we evaluated the psychological impact of term preeclampsia screening based on the sFlt-1/PIGF ratio. Maternal anxiety and psychological well-being were assessed within two weeks of blood sampling using the State–Trait Anxiety Inventory (STAI) and the WHO-5 Well-Being Index, respectively. Childbirth experience was evaluated within four weeks postpartum using the Labour Agency Scale (LAS), a validated measure of perceived control during labor and delivery.

Results

A total of 2,365 women were randomized (1,185 to the revealed vs. 1,180 to the concealed group). Response rates were 64% for the antenatal questionnaires and 30% for the postpartum assessment. No statistically significant differences were observed between groups in anxiety levels. STAI scores, categorized as low (20–37), moderate (38–44), and high (45–80), were comparable for both groups in state anxiety (36.5 ± 9.7 vs 36.2 ± 9.3 ; $p = 0.09$) and trait anxiety (36.7 ± 9.0 vs 37.9 ± 9.3 ; $p = 0.38$). Psychological well-being, defined as impaired when the WHO-5 score was ≤ 50 , did not differ significantly between groups (63.1 ± 17.7 vs 61.7 ± 18.3 ; $p = 0.88$). However, the concealed group demonstrated significantly lower LAS scores compared with the revealed group (122.6 ± 32.6 vs. 128.4 ± 33.8 ; $p = 0.02$), indicating a reduced perceived sense of control during childbirth.

Conclusion

Universal screening for term preeclampsia using the sFlt-1/PIGF ratio at 35–37 weeks' gestation does not increase maternal anxiety or compromise psychological well-being. Disclosure of screening results may be associated with a greater perceived sense of control during childbirth.