

CONFERENCE ABSTRACT

Implementation and effects of risk-dependent obstetric care in the Netherlands: a clinical impact study Expect Study II

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Introduction: This study will compare former obstetric care as usual Expect I with risk-dependent care using a prediction tool Expect II. The Expect I study externally validated 39 prediction models using data of 2,614 women prospectively included from 2013 to 2015. Clinically useful models were embedded in a prediction tool. At the same time, risk-dependent care paths were developed by gynaecologists and midwives of Limburg southern province of the Netherlands. In risk-dependent care antenatal care is tailored to the results of individual risk assessments. Furthermore, these care paths stimulate integrated obstetric care by intensifying the collaboration between midwives outpatient clinics and gynecologists hospitals. Risk-dependent care is currently embedded in Limburg.

Methods: A multicenter prospective cohort study will be performed from 2017 to 2018, enrolling women who will receive risk-dependent obstetric care Expect II. Obstetric risk profiles will be calculated using a web-based prediction tool comprising validated prediction models. Primary outcomes are adherence of healthcare professionals and compliance of women to key recommendations which were inadequate in former care as usual; e.g. recommendations regarding calcium intake to all women Expect I: adequate calcium intake in 34% of women and low dose aspirin treatment to women with an elevated preeclampsia risk Expect I: actual use in the high-risk group: 1.5%. Secondary outcomes are patient satisfaction and healthcare costs. Health outcomes such as neonatal adverse events will be analyzed in the second part of the Expect II study using registry data of the region.

Preliminary results: Seven months after introduction we estimate that our prediction tool is used in ~40% of all pregnant women in participating regions. At the moment, 150 women are included in our cohort. Recommendations about calcium intake during pregnancy were given to 112 women 74%, 91 of these women 61% reported the intention to comply with the recommendations received. In case of an elevated preeclampsia risk n=62 preventive aspirin treatment was recommended to 41 women 66%, 18 of these women 29% reported the intention to comply.

Discussion: Implementing new guidelines takes time and requires an additional effort of healthcare professionals. Especially if these guidelines reorganize the logistic structure of healthcare and include new strategies such as a prediction tool.

Conclusion: The preliminary results of this study indicate that risk-dependent care has already been implemented by a reasonable proportion of healthcare professionals. Furthermore, risk-dependent care combined with a web-based prediction tool appears to increase usage of preventive interventions.

Lessons learned: Since this abstract reveals preliminary results it is too soon to draw conclusions about any lessons learned.

Limitations: These results are based on preliminary data, thus a relatively large proportion of participants are included by healthcare professionals who immediately started using our tool. Therefore, the preliminary results may suffer from a selective response of healthcare professionals in the early stages of our study.

Keywords: risk-dependent care; prediction; obstetric care; adherence; compliance
