

# “Het effect van teamtraining van alle betrokken verloskundige zorgverleners in een simulatiecentrum op perinatale sterfte in Nederland.”

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Transmural multiprofessional simulation-based obstetric team training, regarding management of the BIG 4 causes of perinatal mortality will improve perinatal outcome, communication and teamwork and satisfaction of patients and care providers.

<b>Ethische beoordeling</b>	Positief advies
<b>Status</b>	Werving nog niet gestart
<b>Type aandoening</b>	-
<b>Onderzoekstype</b>	Interventie onderzoek

## Samenvatting

### ID

NL-OMON28428

### Bron

NTR

### Aandoening

Perinatal mortality in the Netherlands is relatively high compared to other countries in Europe. In the Netherlands, primary care (independent midwives) provides care to low risk pregnancies and secondary care (gynaecologists) takes care of high risk pregnancies. There are a lot of handovers between primary and secondary care. Dutch audits concluded that in this chain of obstetric care process management could be improved. Main causes of perinatal mortality (so called BIG4) are: preterm delivery, congenital anomaly, small for gestational age (SGA) and low Apgar score.

Obstetric team training improves perinatal outcome and teamperformance.

Keywords: multiprofessional, simulation-based obstetric team training, perinatal mortality

Keywords (dutch): multiprofessionaal simulatietraining verloskunde, perinatale sterfte

### Ondersteuning

**Primaire sponsor:** ZonMw

**Overige ondersteuning:** ZonMw

## Onderzoeksproduct en/of interventie

### Uitkomstmaten

#### Primaire uitkomstmaten

perinatal mortality and occurrence of BIG 4 disorders

## Toelichting onderzoek

### Achtergrond van het onderzoek

Introduction: Perinatal mortality and morbidity in the Netherlands is relatively high compared to other countries in Europe. Our country has a unique system with an independent primary care providing care for low risk pregnancies and a secondary care for high risk pregnancies. Data showed that 85.2% of perinatal mortality is caused by one or more of the following disorders, the so called BIG 4: preterm delivery, small for gestational age, congenital anomaly and low Apgar score. Studies have shown that obstetric team training improves perinatal outcome and team performance.

Objectives: The aim of this study is to improve perinatal outcome by transmural multiprofessional simulation-based obstetric team training.

Methods: 4 hospitals will join the study. Each hospital with its referring primary care will form a cluster (study group). Within each cluster, teams will be formed by ambulance providers, maternity nurses, primary midwives, obstetric nurses, secondary care midwives, residents, and gynaecologists. The study will be implemented in the south-eastern part of the Netherlands (Zuidoost-Brabant) consisting of nearly one million inhabitants with an annual delivery rate of over 9,000. In this area around 120 independent midwives are providing primary care. Secondary care is provided by four hospitals. Training of the study groups will be provided in a medical simulation center. A stepped wedge trial design will be employed. A stepped wedge trial is a cluster randomized trial in which all study groups (clusters) receive the intervention by a sequential roll out of the trainings over a number of time periods. The stepped wedge design by default controls for changes over time since data are collected for each measurement period for all study groups and study groups serve as a period matched control. Computerized randomization will define the sequence of the study groups.

Outcomes: Primary outcome will be perinatal mortality and occurrence of BIG 4 disorders. Secondary outcome will be team performance and satisfaction of patients and health providers.

Conclusion: The effect of transmural multiprofessional simulation-based obstetric team

training has never been studied. We hypothesize that this team training will improve perinatal outcome, team performance and satisfaction of patients and care providers.

### **Doel van het onderzoek**

Transmural multiprofessional simulation-based obstetric team training, regarding management of the BIG 4 causes of perinatal mortality will improve perinatal outcome, communication and teamwork and satisfaction of patients and care providers.

### **Onderzoeksopzet**

Taking into account the design effect, we need 565 deliveries per measurement period per cluster. To achieve this number we need 16 weeks for each period, adding up to a total study period of 82 weeks including a 16-week control period before the first training.

### **Onderzoeksproduct en/of interventie**

multiprofessional, simulation-based obstetric team training

## **Contactpersonen**

### **Publiek**

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### **Wetenschappelijk**

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## **Deelname eisen**

## Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

four hospitals will join the trial. Each hospital with surrounding primary care will form a cluster (study group). Within each cluster, teams will be formed by ambulance care providers, maternity nurses, primary midwives, obstetric nurses, secondary care midwives, residents, and gynaecologists.

## Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

none specifically

## Onderzoeksopzet

### Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Anders
Blinding:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

### Deelname

Nederland	
Status:	Werving nog niet gestart
(Verwachte) startdatum:	01-02-2014
Aantal proefpersonen:	3390
Type:	Verwachte startdatum

## Ethische beoordeling

Positief advies	
Datum:	02-05-2014
Soort:	Eerste indiening

## Registraties

### Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

### Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

### In overige registers

Register	ID
NTR-new	NL4453
NTR-old	NTR4576
Ander register	ZonMw : 2009020010

## Resultaten