# Training Obstetrische Spoed Teams Interventie- studie.

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Ethische beoordeling	Niet van toepassing
Status	Werving gestart
Type aandoening	-
Onderzoekstype	Interventie onderzoek

# Samenvatting

#### ID

NL-OMON21247

Bron NTR

Verkorte titel TOSTI trial

#### Aandoening

Obstetric emergencies (Obstetrische acute zorg) Multidisciplinary team training (Multidisciplinaire teamtraining) Simulation centre (Simulatie centrum) MedSim

#### Ondersteuning

#### Primaire sponsor: ZonMW (primary sponsor)

- Eindhoven University of Technology, Eindhoven, the Netherlands

- Department of Obstetrics and Gynaecology, Máxima Medical Centre Eindhoven-Veldhoven, the Netherlands

- MedSim (Medical Education and Simulation Centre), Máxima Medical Centre Eindhoven-Veldhoven, the Netherlands

- Faculty of Health, Medicine and Life Sciences, Maastricht University, the Netherlands

- Health insurance companies VGZ and CZ, the Netherlands

- Stimulus foundation (Europees Fonds voor Regionale Ontwikkeling) by MMC in association with TU/e and European Design Centre **Overige ondersteuning:** ZonMW

## **Onderzoeksproduct en/of interventie**

## Uitkomstmaten

#### Primaire uitkomstmaten

Primary outcome is the number of obstetric complications throughout the first year after the intervention. Obstetric complications will be defined as the number of neonates with perinatal asphyxia (Apgar 5-minutes <7, hypoxic ischemic encephalopathy (H.I.E.), number of newborns with damage caused by shoulder dystocia (lesion of brachial plexus, clavicle fracture), number of women with eclampsia, number of women with severe post partum haemorrhage (blood transfusion >4 packed cells), hysterectomy, embolisation), number of women with amniotic fluid embolism. These complications will be obtained from the regular obstetric recordings (with exception of damage due to shoulder dystocia and severe postpartum haemorrhage, these data will be registered separately).

# **Toelichting onderzoek**

#### Achtergrond van het onderzoek

#### Background:

There are many avoidable deaths in hospitals because the care team is not well attuned. Training in emergency situations is generally followed on an individual basis. In practice, however, hospital patients are treated by a team composed of various disciplines. To prevent communication errors, it is important to focus the training on the team as a whole, rather than on the individual. Teamtraining appears to be important in contributing toward preventing these errors. Obstetrics lends itself to multidisciplinary team training. It is a field in which nurses, midwives, obstetricians and paediatricians work together and where decisions must be made and actions must be carried out under extreme time pressure. It is attractive to belief that multidisciplinary team training will reduce the number of errors in obstetrics. The other side of the medal is that many hospitals are buying expensive patient simulators without proper evaluation of the training method.

In the Netherlands many hospitals have 1,000 or less annual deliveries. In our small country it might therefore be more cost-effective to train obstetric teams in medical simulation centres with well trained personnel, high fidelity patient simulators, and well defined training programmes.

#### Methods/design:

The aim of the present study is to evaluate the cost-effectiveness of multidisciplinary team

training in a medical simulation centre in the Netherlands to reduce the number of medical errors in obstetric emergency situations. We plan a multicentre randomised study with the centre as unit of analysis. Obstetric departments will be randomly assigned to receive multidisciplinary team training in a medical simulation centre or to a control arm. To show a reduction in perinatal asphyxia of 40% (from 1% to 0.6%) two groups of more than 8,000 patients are necessary. Primary outcome is the number of obstetric complications throughout the first year period after the intervention. If multidisciplinary team training appears to be effective a cost-effective analysis will be performed.

#### Discussion:

If multidisciplinary team training appears to be effective, this training should be implemented in extra training for gynaecologists.

The Netherlands.

#### Doel van het onderzoek

There are many avoidable deaths in hospitals because the care team is not well attuned. Training in emergency situations is generally followed on an individual basis. In practice, however, hospital patients are treated by a team composed of various disciplines. To prevent communication errors, it is important to focus the training on the team as a whole, rather than on the individual. Team training appears to be important in contributing toward preventing these errors. Obstetrics lends itself to multidisciplinary team training. It is a field in which nurses, midwives, obstetricians and paediatricians work together and where decisions must be made and actions must be carried out under extreme time pressure. It is attractive to belief that multidisciplinary team training will reduce the number of errors in obstetrics. The other side of the medal is that many hospitals are buying expensive patient simulators without proper evaluation of the training method.

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#### Onderzoeksopzet

Data (the number of obstetric complications) will be collected one year after the intervention.

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

The intervention group will have multidisciplinary team training in a medical simulation

centre. These team trainings are given by specially trained instructors and facilitators (gynaecologists, anaesthesiologists, emergency care doctors, midwives, educationalists, medical engineers and psychologists). All instructors and facilitators are trained in crew resource management.

The control group will not have multidisciplinary team training in a medical simulation centre.

## Contactpersonen

#### **Publiek**

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### Wetenschappelijk

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## **Deelname eisen**

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

Teaching and non-teaching hospitals in the Netherlands which do not have frequently multidisciplinary team training.

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

Hospitals which already have frequently multidisciplinary team training for its care workers.

## Onderzoeksopzet

#### **Opzet**

Туре:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Toewijzing:	Gerandomiseerd
Blindering:	Open / niet geblindeerd
Controle:	Geneesmiddel

#### Deelname

Nederland	
Status:	Werving gestart
(Verwachte) startdatum:	01-06-2009
Aantal proefpersonen:	20
Туре:	Verwachte startdatum

## Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

Wordt de data na het onderzoek gedeeld: Nog niet bepaald

# **Ethische beoordeling**

Niet van toepassing Soort:

Niet van toepassing

# 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	NL1749
NTR-old	NTR1859
Ander register	ZonMW : 170992303
ISRCTN	ISRCTN wordt niet meer aangevraagd

# Resultaten

# Samenvatting resultaten N/A