Implementation of the NVOG-guideline on PPH and the MOET-instructions: barriers and facilitators amongst professionals and patients

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for the Fluxim study group

Introduction (1)

Post partum hemorrhage (PPH)

- Definition: ≥ 1000 cc blood loss (24 hours after childbirth)
- Leading cause of maternal mortality worldwide
- N° 1 cause of severe maternal morbidity in the Netherlands

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Introduction (2)

- Introduction of a nationwide evidence based guideline and the course Management Obstetric Emergency Trauma (MOET) did not reduce the incidence rates
- Incidence rates doubled 2004-2009: 3.8% to 7%

14,000 women 2009

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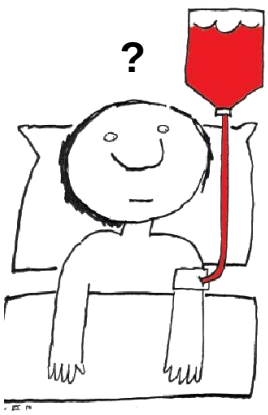
Introduction (3)

- Are the NVOG guideline and MOET instructions implemented sufficiently?



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Introduction (3)

- Objective:

  to detect barriers and facilitators amongst professionals involved in the implementation of the NVOG-guideline on PPH and the MOET instructions and among patients.

- Aim:

  To develop a tailored made implementation strategy to improve the implementation of the NVOG guideline and MOET instructions.

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Methods (1)

- Patient interviews
- Interviews with professionals
- Web-based questionnaire

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Methods (2): Interviews with patients

- 12 patients with PPH for a personal interview

Interviewstructure:

- Patients opinion/experiences with the care around PPH
- 30 minutes
- Audiotaped
- Analyzed using ATLAS: domains

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Methods (3): Interviews with professionals

- Gynaecologists (in training), midwifes and nurses
- Focus group interviews
- E-mail, letter and telephone

Interviewstructure: **Based on quality indicators**

- Expert leading the interviews
- About 1.5 hours
- Audiotaped
- Analyzed using ATLAS: domains

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Methods (4): Grouping domains

Domains (Fleuren & Grol)

- The guideline itself
- The professional
- The patient
- The social setting
- The organization

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Results (1): Patient interviews

- 12 patient interviews
- Personal and telephone
- All types of hospitals represented

General information (N=12)	N (%)	Median	Range
Age (median, range)		28.5 years	20-40
Blood loss (median, range)		3.4 liter	1-6
Total Number of children = 1 Total Number of children = 2	10 (83%) 2 (17%)		
Year of delivery 2009 Year of delivery 2010	6 (50%) 6 (50%)		
Type of hospital: University Type of hospital: Non-university teaching Type of hospital: Non-university nonteaching	3 (25%) 8 (67%) 1 (8%)		

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Results (2): Patient interviews

Domain	Barrier
The professional (n=11)	• The hospital staff does not take the patient serious • Poor information to the patient about prognosis, condition and operation • Poor information to the partner/family of the patient about the condition of the patient • No/incorrect advise from the physicians for the next pregnancy/delivery • Staff panics • Patient receives inconsistent information from the hospital staff
The patient (n=6)	• Prematurely discharged from the hospital • Patient refused a oxygen mask
The social context (n=2)	• Incorrect or incomplete transmission of information about the course of the delivery from the gynecologist to the midwife
The organization (n=4)	• Blood products not directly available • Shortage of staff • The patient has to deal with many different clinicians

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Results (3): Interviews with professionals

- 9 gynecologists
- 8 gynecologists in training
- 15 midwifes
- 9 nurses

- All types of hospitals represented

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Results (4): Interviews with professionals

- In total 56 barriers and 12 facilitators

Domain	Barrier
The guideline itself(n=8)	• Some important aspects of the guideline and MOET instructions are missing in the local protocol • The accessibility of the guideline is insufficient/difficult • The NVOG guideline is not described in clear steps • The NVOG guideline is not suited to use in acute situations, you need to have a local protocol or flowchart/checklist • Not having a flowchart of checklist (available) (in the delivery room)
The professional (n=18)	• Lack of knowledge • Too much faith in their own assessment skills about the quantity of the blood loss as a reason not to weigh the blood loss • Experiencing a feeling of time pressure • Too much faith in the knowledge of other staff as a reason not to appoint the patient as a high risk patient
The social setting (n=10)	• Communication in the delivery rooms between different professionals • Disagreement about the seriousness of the situation • Disagreement with the staff working in the lab/anesthetist about blood ordering • Working with inexperienced colleagues
Organization (n=20)	• Materials are not available • Shortage of staff • Materials are not available at the delivery rooms, so you have to leave the room to find them

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Results (5): Interviews with professionals

Facilitators

- Having a checklist/flowchart
- Training on using the checklist
- Having skills and drills
- Including the MOET instructions and all aspects of the NVOG guideline into the local protocol

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Conclusions

We identified barriers and facilitators for adherence to the NVOG-guideline and MOET instructions

We should:

- Add a checklist/flowchart to the guideline and train professionals on using it
- Get more insight into problems related to the local protocol
- Focus on more skills and drills and multidisciplinary audits

With this information we can develop a tailor-made implementation strategy.

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The Fluxim study

- Development guideline based indicators
- Actual care assessment in 16 hospitals on 400 high risk patients for PPH
  - observation of the third stage of labor by video recording and medical chart search *(including)*
  - observation of the organizational care for PPH
- Barriers and facilitators (focusgroup interviews)
- Development and test a tailor-made implementation strategy in a feasibility study

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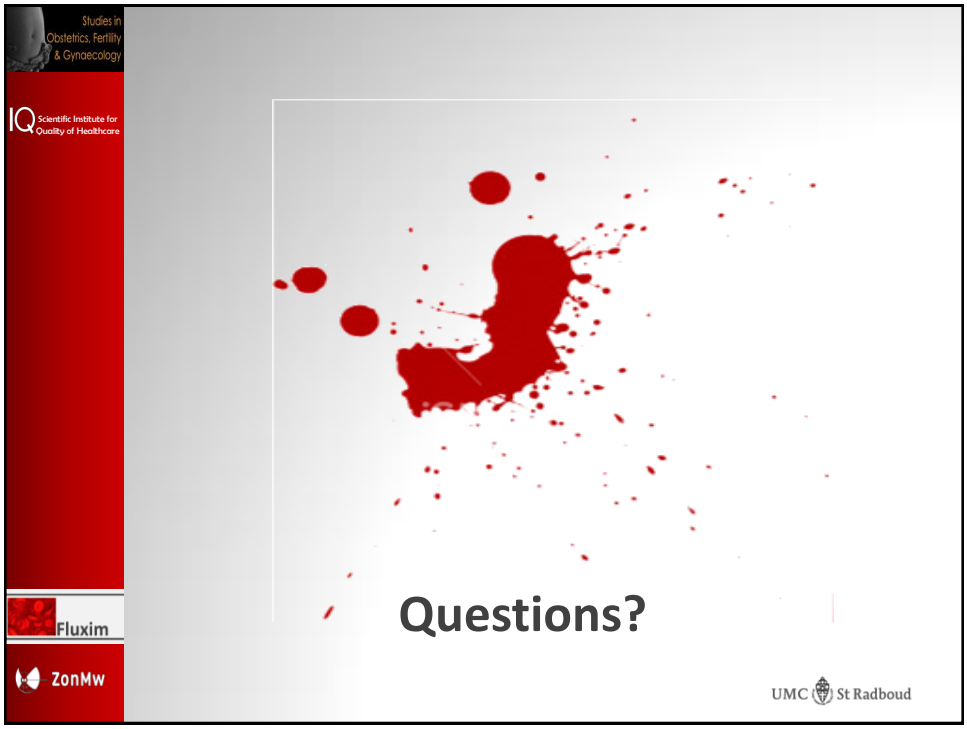
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