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Organisation of emergency transfer in maternity care in the Netherlands

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ABSTRACT

Objective: to gain more insight in the perceptions and experiences of care providers and clients with the organisation of emergency transfer in maternity care, with regard to transportation, responsibilities and communication between caregivers.
Background: in the Netherlands a woman with an uncomplicated pregnancy can choose to give birth at home, assisted by her own midwife. However, when complications arise, she needs to be referred to a hospital. In case of an emergency this referral must be effectuated quickly, often with ambulance support.
Design: a mixed methods' study consisting of semi-structured interviews and surveys.
Methods: qualitative data of the current organisation of emergency transfer in maternity care, including experiences of caregivers were collected through 21 semi-structured interviews. On the basis of the qualitative data questionnaires for a survey were developed. These questionnaires were sent to 181 caregiver organisations and an unknown number of clients. The response among caregivers was 108 (60%), the response among clients was 42.
Findings: the overall result from the interviews as well as from the questionnaires is that at the personal level cooperation is often adequate, but mostly informal. Care providers from different professions explained in the study that in emergency situations they usually know how to find each other but they are not always aware of existing agreements or protocols, are unsure of each other's competencies and do not always know what to expect from other care providers. Looking back at their experiences the majority of the clients responded that they were taken very good care of at the hospital.
Key conclusion and implications for practice: because transfer of care from one care provider to another during labour or birth is not unusual in the Dutch maternity care system it is necessary for care providers involved in this transfer to know and trust each other, to be able to give an adequate reaction when needed. Recommendations given are to devise a protocol for midwives when calling an ambulance dispatch centre, to improve the knowledge about each other, for instance by providing combined courses for emergency obstetrics, preferably at the regional level, so people who actually may work together can train together, and to improve the referral process from midwife to obstetrician.

Introduction

In the Netherlands a home birth, assisted by a midwife, is still common, although numbers are declining. In 2008, the proportion of women giving birth in hospital under supervision of an obstetrician was 67 per cent, whereas 23 per cent gave birth at home and 10 per cent gave birth in a birth centre or hospital ward, accompanied by their own midwife (PRN, 2011). When complications arise during a home birth or in a birth centre, the woman needs to be referred to the hospital. In case of an emergency this referral must be effectuated quickly, often with ambulance support.

This referral and transfer from community midwife or GP (primary care) to gynaecologist/obstetrician (secondary care) has recently been put in the centre of the debate about quality and organisation of maternity care in the Netherlands. The reason for this was the second Peristat publication indicating that the perinatal mortality rate in the Netherlands is higher than in most other European countries (EURO-PeRISTAT, 2008). Because there are no simple explanations for the differences between countries (Evers et al., 2010), attention was drawn to the organisation of maternity care, which in the Netherlands differs profoundly from that in all other European countries.

In the Netherlands midwives are independent medical practitioners who provide full maternity care, that is: antenatal, natal and postnatal care, to women with a low-risk status. Midwives are responsible for the initial risk-selection according to the Obstetric

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Manual, a list of (medical) indications and complications with recommendations for the appropriate level of care, agreed upon by all three professional organisations (midwives, GPs, and obstetricians) (CVZ, 2003). As risk factors can arise at any time, risk-selection is a continuous process and referral can take place at any moment during pregnancy, labour, birth or postpartum period.

There are 91 general hospitals in the Netherlands, of which eight are University Medical Centres (UMCs). Most of the hospitals have labour wards where a midwife can refer her client to in case of (threatening) complications. The organisation of trauma care, including emergency obstetrics, is coordinated in 11 the so-called 'trauma regions' with a UMC or other large hospital as trauma centre. There are 25 ambulance dispatch centres in the Netherlands with almost 700 ambulances, stationed at more than 200 locations (Ambulancezorg Nederland, 2010).

Most pregnant women are healthy with no known risk factors and they start their antenatal care with a midwife. About fifteen per cent start antenatal care with an obstetrician because their risk profile cannot be considered to be low, based on their medical or obstetric history, and they stay in secondary care until after giving birth. An estimated 36 per cent of all pregnant women experience referral from a primary care midwife to a secondary care obstetrician early or late in pregnancy, but before the onset of labour. About 15 per cent of all pregnant women or 31% of women in midwifery care at the onset of labour, experience referral during or immediately after labour and birth (CBS, 2009; PRN, 2011). Fig. 1 shows the referral rates and the actual place of birth in 2008.

Referrals before the onset of labour are seldom emergencies that need immediate interventions. They rather lead to a change in the consultation schedule, to include one or more visits to an obstetrician. Referrals during labour, especially when a birth at home or in a birth centre has been planned, involve unplanned and sometimes emergency transfer to a hospital. There is very little information available on the frequency of emergency transfers for pregnant or labouring women, because 'emergency' or 'urgency' is not included in the usual registrations. However, by studying the reasons for referral a distinction can be made between urgent and not urgent. Amelink-Verburg et al. (2008) showed that 31.9 per cent of the women who started labour under the care of a midwife in the years 2001–2003 were referred to secondary care, 28.3% without and 3.6% with urgency. Of the women who had planned to give birth at home 3.4% experienced an urgent referral, while that was the case for 4.1% of the women who planned to give birth in hospital, assisted by their own midwife. Converting this per centage to the total number of births in the Netherlands in 2011 means that each year about 3000 women experience an urgent referral during labour or birth, about 2000 of whom have planned a home birth and thus need transport.

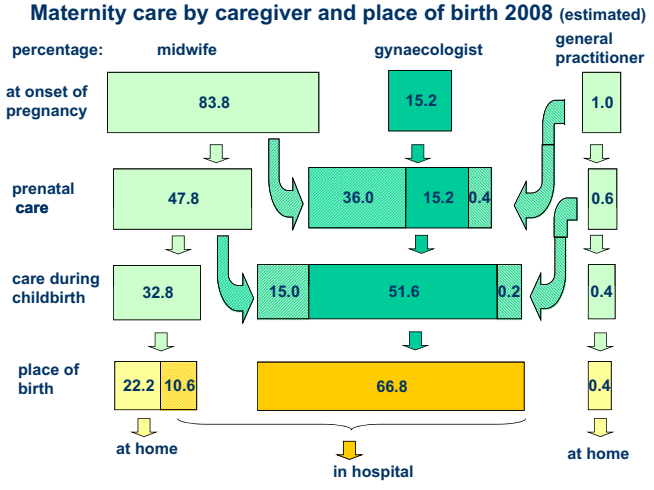

Fig. 1. Proportion of women in maternity care by caregiver at different stages, referrals during antenatal and natal care, and actual place of birth 2008.
Source: PRN, CBS.

There are also very few data available about emergency transfers from home to hospital in other developed countries. Johnson and Daviss (2001) reported that approximately 2% of clients of midwives who practice out-of hospital in 2000 in the US were transported for potentially life-threatening emergencies and approximately 6% for precautionary reasons. A later publication provided more detailed information albeit with a different definition: 12.1% of women intending to give birth at home with a certified professional midwife in the US were transferred to hospital intrapartum or post partum, with 3.4% needing urgent transport (2.1% before and 1.3% after birth of the infant) (Johnson and Daviss, 2005). In addition, transport stories have been published as indication of 'how reproduction can go unnecessarily awry when domains of knowledge conflict' (Davis-Floyd, 2003). Davis-Floyd summarises several ways in which this can occur. For instance: the midwife waiting too long to summon transport, the hospital staff not understanding the urgency of the problems, the ambulance team failing to respond properly, or miscommunication between midwife and ambulance team or midwife and hospital staff. Although the situation of home birth midwives in the USA and Mexico is very different from that in the Netherlands, some similar critical issues or events or circumstances that may hamper the cooperation between professionals in obstetric emergency transport may be found.

This exploratory study investigates the perceptions and experiences of care providers and clients with the organisation of emergency transfer of pregnant or labouring women in the Netherlands. The aim of this study is to gain more insight into the way emergency transfers in maternity care are organised, with regard to transportation, responsibilities, communication and cooperation between care providers, the bottlenecks or critical issues, events and circumstances, and the potential for improvement.

Methods

Study design

This paper reports on a study consisting of semi-structured interviews followed by surveys. Information about the organisation of emergency transfer in maternity care has been collected through interviews. The themes resulting from the interviews and from literature were used in a survey among professionals and clients in order to confirm and quantify these perceptions and experiences. The purpose of including clients was to see emergency transfers from the clients' perspective, and to learn from their experiences, not to arrive at conclusions about clients in general.

Sampling

Interview candidates were selected on the basis of their profession and the trauma region they were working in and contacted through their professional organisations (purposive sampling). The aim was to interview at least one professional from each trauma-region and at least four from each position in the 'chain-of-care': primary care midwives, general practitioners, ambulance personnel and labour ward staff.

Questionnaires were sent to 180 care provider organisations: 88 midwifery practices, 44 hospitals with labour wards, 25 ambulance services and 23 GP out-of-hours cooperatives, with the request that one of the persons most knowledgeable about emergency transfer would respond. The samples of midwifery practices and hospitals