The fall and rise of home deliveries*

A queda e a ascensão dos partos domiciliares

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Home deliveries have for long been a national relic of the Netherlands, whereas they became distinct in all other Western countries since the mid-1950s. Currently, the incidence of home deliveries in the Netherlands is rapidly decreasing; however, they are being reintroduced in many other countries. Why do these opposite trends occur?

The dutch system of obstetric care

The disappearance of home deliveries in the Western world was not based on randomized controlled trials, but on the belief that they were hazardous and less safe than those in hospital. In the Netherlands, there was the view that birth is essentially a physiological event and that home delivery can prevent unnecessary obstetrical interventions, which might increase the risk to the mother and fetus[1]. Indeed, studies conducted around the 1970s showed that the perinatal mortality rate in the Netherlands remained one of the lowest in the world, whereas those of instrumental vaginal delivery and Caesarean section were much lower than in neighbouring countries[2]. Moreover, Dutch studies showed that obstetricians who attended low-risk deliveries were more liberal in the use of oxytocic drugs, instrumental deliveries, and episiotomies than general practitioners or midwives[3]. Neurological outcomes of newborns were identical in the three groups of care providers. In the early 1990s, it was shown that midwives attending low-risk deliveries in hospitals encountered more complications than they did at home deliveries[4].

The Dutch system of obstetric care is based on the assumption that pregnancy and delivery are physiological events, and should therefore preferably be attended by midwives and general practitioners in order to prevent unnecessary interventions. The system is further based on a continuous assessment of risk. Women are referred to the most appropriate caregiver according to their risk category: low-risk patients are cared for by a midwife or general practitioner, while those in the high-risk group are seen by an obstetrician in a hospital setting. Patient selection is first made in early pregnancy, usually by the general practitioner, and the patient continues with the assigned care provider throughout pregnancy, delivery, and puerperium. In the event of complications during pregnancy, an obstetrician is consulted and further care, if necessary, is provided in a hospital. A fixed list of general medical and obstetric complications

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is used to indicate whether referral to an obstetrician is necessary. Such regulation is essential, given that three distinct health care occupations are involved, but adequate communication and respect between these caregivers are of the greatest importance, since regulations will never cover all possible clinical circumstances. In this context, it is also important that in the Netherlands midwives are independent practitioners. Insurance companies favoured home deliveries by making them the cheapest birthing option; low-risk patients who wanted to deliver in a hospital under the care of a midwife or a general practitioner had to pay extra money, and low-risk women who wanted to have their care provided by an obstetrician had to pay most of the cost themselves.

In the second half of the last decade, the Dutch system of obstetric care came under pressure. This occurred after the first and second data publications from the European PERISTAT project on perinatal mortality in various European countries, with the Netherlands ranked (more or less) at the list bottom[5,6]. The maternal mortality was also found to be relatively high[7,8]. More than 50% of low-risk healthy nulliparous women who started labour at home were transferred to hospital during labour due to failure to progress or signals of fetal asphyxia[1]. Therefore, what had gone wrong? Most likely, the first-line caregivers and obstetricians had become too expectant in their approach, with a general belief in a favourable outcome. The high referral rate of healthy nulliparous women during labour happened possibly due to the fact that care at labour — the stronghold of midwives in the early days — had been neglected because of busy working days and financial restrictions leading to fewer specially trained maternity home care assistants. Thus, it left the majority of women labouring at home with no real support, with a midwife visiting only once every two to four hours. Studies with doulas have shown the importance of the continuous presence of a companion or caregiver for the delivery outcome[9,10]. Women classify the level of satisfaction of having a delivery at home as "high," but they also consider the stress of requiring a referral during labour as "high"[11].

Hence, in the Netherlands, we had lost important aspects of care (not only at home, but also in hospital) and had persisted in a too conservative approach towards risk factors during pregnancy and delivery.

At present, the incidence of home deliveries is rapidly decreasing with about 1 to 2% per year to about 15% in 2012. It is likely that this trend will continue because of the recent negative publicity regarding the safety of home delivery; because midwives are required to counsel their patients on the high referral rates during labour (which did not always take place in the past); because of the high proportion of immigrants who are not familiar with home delivery; and because there is an increasing demand for epidural anaesthesia. The system is being adjusted to this change by institutionalizing birthing centres led by midwives and located in or adjacent to hospitals, thereby avoiding transport from home to hospital if there is a need for referral.

Recent Dutch data have shown that home deliveries remain relatively safe, with low interventions and maternal morbidity. However, they have a slightly increased risk of delivery-related perinatal death, and the same risk of admission to a neonatal intensive care unit as infants of pregnant women at high risk whose labour started in secondary care under the supervision of an obstetrician[12,13].

There are similar data from the United Kingdom and similar conclusions from a meta-analysis from the USA[14,15].

Reintroduction of home deliveries in many western countries

When Dutch obstetricians are asked to talk on home deliveries, for instance in countries like the Czech Republic, Italy, Sweden, Canada, the USA and recently Brazil, it becomes clear that the world is changing. Home deliveries reappear and obstetricians are opposing this trend through the act of writing articles like "Planned homebirth; not a Dutch treat for export"[16]. Nonetheless, the Dutch are not exporting, but other countries are — illegally — importing.

In these countries, women opting for a home delivery are likely to be the most motivated ones, since the health care system is not adjusted to the phenomenon of home deliveries. Hereby, they regularly ignore risk factors, such as breech presentation, twins, previous Caesarean delivery and advanced maternal age[17,18]. Moreover, the distance to hospitals is generally larger than in the Netherlands. Data from Australia, from the 1980s, have already demonstrated that perinatal risks are increased in such circumstances, with inadequate training of midwives, lack of postgraduate education and criteria for risk assessment and too motivated patients and caregivers who are ignoring risks[19].

Therefore, the question arises as to why these women decide to have their babies at home. It is important to ask them using structured questionnaires, however I am not aware of the existence of such studies. In my opinion, the reappearance of home deliveries in these countries may well be a sign of discontent with the current birthing system, with labour wards resembling operation theatres, lots of cure with high intervention rates but no care. In some countries, Caesarean delivery rates have reached 50% or more and that cannot be explained by dramatic increases in risk factors, but seems more likely to be the consequence of financial incentives and medical-legal issues[20,21]. In the USA, a vaginal birth after a Caesarean delivery (VBAC) has become almost impossible in some areas, which results in Caesarean deliveries in all subsequent pregnancies. Clear benefits of increasing Caesarean delivery rates have never been shown. Disadvantages, such as placenta praevia and accrete in subsequent pregnancies and an increase in autoimmune diseases and obesity in the offspring of women delivered abdominally become more and more clear[21].

Thus, it is time that obstetricians start listening their clients and midwives. According to my discussions with midwives in several countries, calls for a reintroduction of home delivery seem to be more a reaction against the over-medicalized birth environment and high intervention rates in hospitals than a plea for home delivery per se. Home deliveries in a setting that is not equipped to this kind of care may increase perinatal risks, and do not seem to be the best option. But the current system of hospital deliveries has to be adapted towards more care and less cure. There is the need for a more human approach. The development of low-risk delivery units connected to hospitals and run by midwives may serve such purpose.

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