Obstetric Care in the Netherlands: Relic or Example?

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Abstract

This review assesses the rise and fall of the unique Dutch system of obstetric care. Why did home deliveries continue in the Netherlands when they almost completely disappeared in the rest of the Western world? Why is the Dutch system currently under so much pressure? Did the participants continue for too long with too conservative an approach? Which of the good things of the past have been lost?

Résumé

Cette analyse évalue la montée et la chute du système hollandais particulier en matière de soins obstétricaux. Pourquoi continuait-on à procéder à des accouchements à la maison aux Pays-Bas, alors que ceux-ci avaient presque entièrement disparu dans le reste du monde occidental? Pourquoi le système hollandais subit-il actuellement tant de pression? Les participants ont-ils continué à adopter une approche trop conservatrice pendant trop longtemps? Quels sont les bons aspects du passé qui ont été perdus?

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INTRODUCTION

"Obstetrical care in the Netherlands: relic and example" was the title of a chapter in the book *Health and Health Care in the Netherlands* that I wrote 10 years ago.[1] When discussing health care in the Netherlands it seems logical to include the Dutch obstetric system, because it differs from those in other countries in that home deliveries are still performed in over 20% of cases.

Since I wrote the chapter, the incidence of home deliveries has been increasing in countries like the United States and the United Kingdom,[2–4] whereas they are under increasing pressure in the Netherlands. For many, the Dutch system is still an example, but for others it is more and more a relic. For this review of the Dutch system of obstetrical care I have therefore changed the title from "relic *and* example" to "relic *or* example."

Key Words: Low risk deliveries, home deliveries, Dutch system of obstetric care

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WHY ARE THERE STILL SO MANY HOME DELIVERIES IN THE NETHERLANDS?

Home births were a common phenomenon in Europe until the mid-1950s, when obstetricians came generally to believe that deliveries at home were hazardous and less safe than those in hospital, where modern technology was increasingly available to safeguard the health of mother and infant during labour. In the Netherlands, however, the view prevailed that birth is essentially a physiological event and that home delivery can prevent unnecessary obstetrical interventions, which might increase the risk to mother and fetus. This view was eloquently expressed by Dr G.J. Kloosterman, of the University of Amsterdam, who was also head of the Amsterdam midwifery training program.

Politicians followed the advice of obstetricians, and within a span of five to 10 years home deliveries had been discontinued in most European countries. In the Netherlands, however, obstetricians were also heard, and home deliveries continued. At this point it is important to note that neither in the Netherlands nor in other countries had any prospective randomized trial been performed to compare home versus hospital deliveries, nor had women been asked for their own opinions in this regard. Such trials are at present still lacking.

In the 1960s and 1970s the Dutch approach seemed correct, since the perinatal mortality rate in the Netherlands remained one of the lowest in the world, whereas rates

of instrumental vaginal delivery and Caesarean section remained much lower than in neighbouring countries. This was nicely illustrated by comparing data from Denmark—where increasing hospital deliveries were associated with a four-fold increase in rates of Caesarean section and vaginal instrumental delivery between 1960 and 1980—and data from the Netherlands, where there was an increase of only 50% over those years.[5] 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 either general practitioners or midwives.[6] Neurological outcomes of the 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 in home deliveries.[7] These figures supported the Dutch view that hospital delivery may result in an increase in unnecessary obstetrical interventions. In the 1980s, well-designed observational studies from the United States, the United Kingdom, and Australia all demonstrated the safety of home deliveries in a well-organized and supervised setting.[8–11] In a commentary on several articles concerning the place of delivery and obstetric interventions published in 1986, it was concluded that "all the available evidence suggests that in carefully selected and well-supervised low-risk deliveries the extra risk to mother and baby attributable only to the absence of hospital facilities must be low and the satisfaction of a successful delivery high."[12]

THE DUTCH OBSTETRIC CARE SYSTEM

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 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: patients who are considered low-risk are cared for by a midwife or general practitioner, whereas 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 the puerperium. If complications arise during pregnancy, an obstetrician is consulted and further care, if considered necessary, is then provided in hospital. A fixed list of general medical and obstetric complications is used to indicate whether referral to an obstetrician is necessary. Such regulation is essential, given that three distinct health care professions 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.

So the Dutch system evolved more or less by chance, influenced by the strong opinions of a few key people. Its initial success resulted in a strong backing of the system by midwives and subsequently by politicians and health care organizations. In addition, obstetricians were in favour of the system, and a conservative approach towards pregnancy and delivery interventions became the Dutch trademark. 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 general practitioner had to pay extra, and low-risk women who wanted to have their care provided by an obstetrician had to pay most of the cost themselves.

A SYSTEM UNDER PRESSURE IN THE 2000S

In the second half of the last decade, the Dutch system of obstetric care came under pressure. This occurred after the first and second publications of data from the European PERISTAT project on perinatal mortality in various European countries, with the Netherlands ranked (more or less) at the bottom of the list.[13,14] Initially many health care professionals ignored these data, pointing towards the high average maternal age, the high incidence of multiple pregnancies, and the effect of immigrant populations in the Netherlands, but those arguments did not explain differences from other countries. One plausible reason for part of this low ranking was the low incidence of (early) pregnancy terminations due to fetal malformations, resulting in a higher perinatal mortality rate. This was due to the absence of a routine ultrasound scan at 20 weeks' gestation.

Pressure increased further after Dr Eric Steegers and I published a commentary entitled "Better Birthing" in a Dutch medical journal in 2008.[15] In this commentary the high perinatal mortality rate was addressed, but we also addressed the high maternal mortality rate. Moreover, we drew attention to the fact that more than 50% of "low-risk" nulliparous women were transferred to hospital during labour because of failure to progress or signs of fetal asphyxia, and because perinatal mortality in hospitals during the night was 23% higher than during the day. Analysis of the high maternal mortality rate in women with preeclampsia revealed that substandard care had been provided in 90% of cases.[16,17] The general picture was that of first-line caregivers who were too reluctant to refer and therefore referred their patients late, and obstetricians whose management was