## Home deliveries in Holland

Dutch maternity care and home confinements\*

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SUMMARY. In the Netherlands a majority of all deliveries take place at home. The perinatal mortality rate is better than that reported from the United ffingdom, probably because obstetric care in hospital is more active and aggressive. Dutch midwives play an important role and the specially trained home helps are most successful. I believe that, provided case selection is rigorous, many women are best delivered at home.

#### Introduction

I am not an authority in this field. I know little about the British system of maternity care and I have only personal experience of maternity care in my own practice, which is predominantly a country practice with favourable social conditions, very close to a big city, with excellent hospitals, including a large teaching hospital.

I have, however, had the experience of caring for about 4,000 pregnant women, and attending in person between 2,000 and 3,000 home deliveries. I have also read the current literature on this subject in my country.

#### The Netherlands

The Netherlands is famous for dykes, canals, windmills, and wooden shoes, but perhaps our organisation of maternity care deserves greater attention as a national characteristic, because, of the Western developed industrialised countries, we have by far the highest percentage of home deliveries.

This is not due to a regrettable backwardness in health care, but to a deliberate choice we have made. We have always regarded childbirth as a natural process which should take place, by preference, spontaneously, without anaesthesia and with a minimum of operative procedure. So we prefer the familiar home-surroundings for the normal delivery, attended by those who also feel at home there—the midwife and general practitioner.

Our insurance system does not pay for hospital admission of normal pregnancies and deliveries. A healthy woman is expected to have her baby at home, unless there is a medical (or social) contra-indication. This is in accordance with our national characteristics: we are home loving, we have a strong family life, we are not afraid of some pain, and we are economical.

This system of maternity care with normal deliveries at home, attended by midwife or general practitioner and only abnormal deliveries in hospital under the care of a specialist-obstetrician, was made possible by the structure of our country: it is very densely populated, there are short distances between home and hospital, good housing conditions, good transport, and on the whole good midwives and general practitioners.

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#### Perinatal mortality rates

We have always been proud of our results. Measured by statistical standards our maternal and perinatal mortality figures have always been amongst the lowest of the world. I have contrasted the latest figures I could find for the United Kingdom and the Netherlands (table 1).

TABLE 1
Comparison of perinatal mortality rate and percentage of home **del**iveries in the netherlands and united kingdom

	United Kingdom	The Netherlands	The Netherlands
	1971	1971	1973
Perinatal mortality	22·5	17·9	16·2
Hospital deliveries	91%	47%	47%

The perinatal mortality in the Netherlands in 1971 was lower than in Britain, while the percentage of hospital deliveries was much lower. These figures may puzzle some people, for it is often taught that one of the most important measures to get better results in obstetrics is to increase hospital deliveries. It is questionable whether this is true for a country like the Netherlands. The reverse could be argued!

In 1970 the perinatal mortality in the Netherlands was 18.6 (33.8 for hospital deliveries and 6.9 for home deliveries). The fact that the figure is almost five times as high in hospital as at home will of course largely be due to the selection procedure leading to a high percentage of pathological deliveries in hospital, but I doubt whether this can wholly explain the difference.

From 1953 to 1970 the perinatal mortality of hospital deliveries went down from 65.0 to 33.8 (almost halved), but for home deliveries it went down from 21.6 to 6.9 (being less than one third of the figure for 1953). In the meantime the percentage of hospital deliveries increased from almost 25 to 42.7 per cent. So the percentage of pathological deliveries in hospital must have been diluted considerably.

#### Hospital deliveries

There are reasons to suspect that obstetric care is now more active and aggressive in hospital than at home. The Dutch College of General Practitioners carried out a study of almost 10,000 deliveries in 1958. We found, for example, that in women admitted to hospital for social reasons labour was more frequently induced and more often ended artificially than in comparable mothers who stayed at home. This will have consequences for perinatal mortality and morbidity.

I have serious doubts about the desirability and safety of hospital for normal deliveries. Home deliveries offer important advantages from an emotional and psychological point of view. Research has made it clear that many women prefer to have their babies at home. In a recent study in the Netherlands, Lapre (1972) found that 70 per cent of all women interviewed chose home delivery and 89 per cent of those who had had previous experience of a home delivery. In Britain Topliss (1970) found that 44 per cent of all mothers preferred a home delivery, 58 per cent of those who were expecting, their next baby and 86 per cent of those who had already experience of both home and hospital deliveries.

In the Netherlands we have deliberately chosen to ensure that the normal delivery takes place at home by choice. Nevertheless, in recent years our number of hospital deliveries has gone up considerably (table 2).

Of the hospital deliveries, about 70 per cent are admitted for medical reasons and 30 per cent for social reasons. About ten per cent of the admissions to hospital had not been foreseen and take place during labour.

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The Netherlands	1961 %	1973 %
Hospital deliveries Home deliveries	28·8 81·2	47 53
General practitioner Gynaecologist Midwife alone	46·4 16·9 36·6	32·5 30·3 37·2

TABLE 2
Analysis of deliveries in the netherlands

The share of the general practitioner in the total number of deliveries has gone down from 46 per cent to 33 per cent, the share of the gynaecologist has gone up from 17 to 30 per cent, while the share of the midwife has stayed the same—37 per cent of all deliveries.

To some extent these changes are to be regarded as wholesome. It was justified to enlarge the number of indications for hospital deliveries with the purpose of reducing the risks of the deliveries that were allowed to take place at home.

The falling birthrate has had the consequence that at present only 40 children are born annually in an average general practice, most general practitioners still work in intensely personal single-handed practice. At the same time the relative proportion of first deliveries has increased with the added uncertainty of an untried mother. On the average a general practitioner in the Netherlands will do about 15 home deliveries a year himself. This is a marginal figure with which to maintain one's skill. Actually more and more general practitioners refrain from doing any deliveries, while a minority of them (especially those in the countryside and in small towns) continue to do most deliveries in their practice. The willingness of general practitioners to do this kind of work is rapidly diminishing, especially in cities.

A gynaecologist in the Netherlands has on the average about 200 deliveries a year, practically all of them in hospital. A home confinement attended by a gynaecologist has become exceptional. There is a recognised list of about 100 indications for hospital confinement, approved by the sick funds. About 70 per cent of the population health care is paid for by these sick funds in a method comparable with the British National Health Service. A midwife is paid about £35, a general practitioner £45, and a gynaecologist £65 for a delivery, including antenatal and postnatal care. Strict application of these 100 indications will result in 30 per cent to 40 per cent hospital confinement. The application of these indications, however, by midwives and general practitioners cannot be controlled by the authorities. In reality some general practitioners succeed, in cooperation with willing gynaecologists, to reach almost 100 per cent hospital confinement of their pregnant patients with "official" indications, while others neglect recognised indications to confine nearly every mother at home. More and more gynaecologists and some professors in obstetrics advocate hospital confinement of all primiparae and some even of all confinements. It is true that it can be stated "labour is only normal in retrospect" and it cannot be denied that the technical developments in hospital care make it possible to monitor efficiently physiological functions of mother and child, gaining time by detecting danger signals.

I feel that these advantages in technology at the same time carry with them the risk of unnecessary intervention. I doubt the wisdom of making the physiological event of a normal confinement in family life, an impressive highly technical procedure taking place in an operating theatre, surrounded by people in white gowns and masks. In my country, even in hospital, as a rule no anaesthetics are used for normal deliveries and perhaps this is one of the reasons why our perinatal mortality figures are so satisfactory.

#### Midwives in the Netherlands

The midwife has a relative secure position in the Netherlands. She still does more than one third of all deliveries. Most midwives are independent professionals without a hospital connection, doing home deliveries on their own. This is made possible by our system of social insurance which entitles 70 per cent of the population (those below a certain level of income) to the right of assistance by a midwife in their local region. If a midwife practises in their neighbourhood, normal pregnant women who prefer to be delivered by their general practitioner, or by a gynaecologist, will have to pay for this themselves. When the midwife is faced with an abnormality or has to deal with one of 100 official indications, she has to call in the help of the general practitioner, and, if necessary, of the specialist-obstetrician. Often this will result in admission to hospital. An average midwife will deliver 100 mothers annually. Usually she sees her patients in a consulting room in her own home. She will have had a three-year training in one of the three schools for midwives. The combination of nurse, or health visitor and midwife, which is common in Britain is—as far as I know—exceptional in the Netherlands. In our country these disciplines are strictly separated both in training and in function.

The schools for midwives are large obstetric hospitals, in which both theoretical education (30 per cent) and practical training (70 per cent) take place. During her training a midwife will have witnessed several hundreds of all kinds of deliveries, including complicated cases; she has to attend 50 confinements herself. Her training in obstetrics is better than the usual basic training of a medical student.

She is educated to pay great attention to prevention and early detection of abnormalities. She is allowed to take blood for examination, to take cervical smears, and to give immunoglobulin to women with rhesus negative blood. She is also allowed to perform episiotomies and to repair the perineum under local anaesthesia.

The midwives in the Netherlands do about two thirds of all home deliveries on their own and their figures of maternal and perinatal mortality are excellent. Of course, this is largely due to a careful selection of women for home deliveries.

Another facility we in the Netherlands think is especially important is the special home-helps we have for maternity care. These girls receive a training of 15 months, they assist the doctor or the midwife with the delivery and they look after, for ten days, the mother and child, under the supervision of a special nurse. They stay in the home with the mother and do the housekeeping for the whole family in the lying-in period. Several studies have shown that the maternal and perinatal mortality figures in the part of the population that is served by these home-helps are better than for the rest of the population.

I think it is a shame that the costs of these home-help services have gone up so enormously in recent years that they cannot be afforded by those who are not insured by the social security laws (30 per cent of the population). This is one of the reasons why our number of hospital deliveries is increasing.

#### Some problems

We do, however, have some problems with maternity care in the Netherlands. I have discussed some of them: general practitioners do not get enough experience with deliveries and their willingness to do this kind of work is diminishing. They increasingly dislike interruptions in their normal routine, the risk of night calls and being on call day and night for their expectant mothers.

The security of the existence of midwives is threatened by the decrease in the birth figures and the increasing hospital admissions. There is not enough systematic co-operation between midwives, general practitioners, and obstetricians, it being often more an

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attitude of either "you or me", instead of working together and sharing responsbilities in maternity care.

There is a lack of systematic control of the quality of maternity care because everybody is free to do or not to do what he or she likes, or thinks best.

#### Conclusion

I still think that there are not enough reasons for radical changes in our system of maternity care or any need to reverse our decision to have a considerable number of normal home deliveries. Studies have proved that by good case selection and good prenatal care it is seldom necessary to rush emergencies to hospital and it is possible to obtain exceedingly low perinatal mortality figures of about 2.5 per cent in home deliveries.

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