

# Middle Articles

## AROUND EUROPE

### Place of Delivery: Dutch Solution

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Despite a decade of exhortation and self-criticism since the perinatal survey of 1958<sup>1</sup> two recent publications<sup>2,3</sup> reveal serious shortcomings in our maternity services. The next 10 years will see a reduced birth rate and an increased hospital confinement rate, together with widespread use of early discharge schemes. The latter were originally devised as a forced economy to increase total hospital confinements in a fixed number of obstetric beds. Now many of those with first-hand experience<sup>4-7</sup> consider the disadvantages of such programmes to be minimal. It may well be found that the greatest cost-benefit is obtained when the hospital is used for the delivery in the majority of cases and the puerperium is spent at home. This will involve fundamental reappraisal of the role of the district midwife, who is doomed to extinction unless her skill can be integrated and maintained in hospital delivery units. In contrast there will be a serious shortage of home helps whose role will be crucial to the success of early discharge arrangements.

I was privileged in being invited recently to Holland to study midwifery at first hand. In view of the probable developments in this country a brief account may be of interest.

#### Background

Traditionally, Dutch obstetric teaching has emphasized the normality of childbirth, and domiciliary confinement is accepted as the usual arrangement, a policy recently criticized by Kloosterman<sup>8</sup>. Results judged by perinatal mortality (22.4 in 1966<sup>9</sup>) are among the best in the world. The midwife enjoys a more responsible and independent role than her British counterpart. For this the three recognized midwifery schools demand a training of three years, reduced to two years if the student is already a qualified nurse.

Approximately 30% of deliveries occur in hospital, the remaining 70% being divided more or less equally between midwives and general practitioners who work independently. To those accustomed to decrying the shortcomings of a tripartite Health Service in the U.K., the Dutch practice in this connexion appears the *reductio ad absurdum*. It is possible for a general practitioner to have his first intimation that one of his patients is pregnant when asked by the midwife to refer her to hospital because of complications in labour. For if a patient books for confinement with the midwife she will normally be supervised throughout her pregnancy and labour by her. Referral to hospital, however, is still officially only by the general practitioner.

The organization of general practice is on much the same lines as in the U.K. Each practitioner has a list of patients and he receives a capitation fee from the Ziekenfonds (medical insurance societies with which all patients with incomes less

than £1,200 per annum are required by law to be insured). Contributions to the insurance societies are scaled according to income and there is an appreciable minority of private patients. A midwife receives fees from the insurance societies for each delivery, and delivers between 200 and 400 cases a year, thus maintaining a high degree of skill.

#### Hospital Obstetric Practice

Antenatal care closely resembles that in Britain, but with more emphasis on salt-free diet for control of toxæmia. The low interference rate is the most immediate contrast with operative obstetrics in the U.K. In peripheral hospitals booking cases solely on medical indications the rates for caesarean section (2.5%) and assisted delivery (5%), almost all vacuum extraction, are considerably lower than those usually found in obstetric units in this country.

In the University Hospital for Obstetrics of Amsterdam, which like other teaching hospitals accepts approximately 50% of bookings for social reasons, the interference rates in 1966 were: forceps 1.8%, vacuum extraction 2.4%, and caesarean section 1.9%. These low rates are due in part to the taller stature and placid temperament of the average Dutch patient and also to the frequent use of Pitocin (oxytocin injection) to stimulate the uterus in inert or prolonged labour. Allied to close scrutiny of the foetal heart rate, this practice does not appear to incur the dangers commonly taught here. The atmosphere of a Dutch labour ward is far more domestic than its British counterpart. Masks are not worn. Husbands are present throughout labour and its commoner complications. Indeed, absence of the husband is a reason for comment.

#### Maternity Aids

The concept of trained domestic help for maternity work began in the provinces of North Holland and Friesland in the first decade of this century, sponsored by the White and Green Cross organizations. In 1925 a national commission assessed the needs for such help, based on the number of home deliveries, and recommended the institution of a national training scheme. In 1943 a further commission proposed the setting up of units called Kraamcentra (maternity centres), responsible for training and organization of maternity helpers, known henceforth as Kraamverzorgsters (maternity aids).<sup>10</sup>

To train as a maternity aid a girl must be over 19 years old and have had low-school education, followed by a period of domestic school. She is then admitted to the 15-month training course.

The success of the scheme can be realized from its rapid growth. A maternity aid is now present for at least two-thirds of general-practitioner home deliveries and more than a third

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of midwife deliveries. This help is obtained in practice by telephoning the local maternity centre; the maternity aid is sent to assist at the confinement and for 10 days afterwards. She is capable of carrying out all normal nursing procedures required in the puerperium, and is required to act as cook and to do laundry for mother and baby. For this she receives a salary which starts at £10 a month in early training and rises to £36 a month when fully trained. Maternity aids are normally fed by the family they work with, and in country districts they often live in, but in urban areas they usually return to their own homes overnight. There is no shortage of recruits.

### Maternity Centre

This local centre is the unit immediately responsible for implementing the scheme. There are approximately 180 such centres in Holland. Each is responsible for training students, arranging contact with patients, and directing the movements and time-tables of its trained staff. A typical maternity centre has a staff composed of sister-in-charge, possessing general nursing, midwifery, and district nursing certificates, and one or two assistants similarly qualified. Premises may be in any suitable house or building with telephone. There is normally access to formal school buildings for initial classwork. The course consists of three months' theoretical teaching, followed by 12 months' practical training. A batch of students is admitted to training every three months, and approximately 30 maternity aids are on the active list of the centre at any one time. These are usually sufficient to deal with requests for help from a population of approximately 150,000. Maternity centres are administered on a provincial basis by a board of management with a district doctor and nursing sister as professional advisers.

### Finance

The cost of administering the scheme—comprising salaries of maternity aids (70%), salaries of teaching staff (14%), and running costs of maternity centres—is met by the insurance societies together with a State subsidy and in some cases a direct contribution from the patient. The total cost per day of care in 1964 was f33 (£3 6s.), representing a substantial saving on hospital costs of f48 (£4 16s.).

### Discussion

There is a marked contrast between a Dutch home in the puerperium, with a maternity aid in daily attendance, and the equivalent household in Britain, where help is supplied by a variety of friends and relations. Of necessity the midwife's

visits are all too brief at such times. But whereas in Britain her efforts are frequently perforce directed to bolstering up household administration, in Holland her task is simplified by charts of temperature, fundal height, and baby weight prepared by the maternity aid and the latter's daily verbal report.

The demand in Holland for such help is expected to rise to about 120,000 confinements annually by 1970, almost half the national total. In Britain similar economic circumstances prevail, and, though the deliberate home confinement rate will fall, this is almost certain to be achieved by increased early discharge from hospital. In these circumstances the requirement for home help is only marginally less than for routine domiciliary delivery.

It is probable that a similar demand would attend the provision of a maternity aid scheme here. The financial implications may be daunting at a time of economic stress, but there is no doubt that many patients would be prepared to contribute direct as they do in Holland. Regional organization within the framework of the National Health Service might well be possible under the aegis of the local health authority, and consideration could be given to pilot schemes in areas where early hospital discharge is gaining predominance.

### Summary

The history and organization of domestic help for home confinement in the Netherlands are reviewed. It is suggested that, in view of the current trend to early hospital discharge, similar arrangements may be found of value in Britain.

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### REFERENCES

- <sup>1</sup> Butler, N. R., and Bonham, D. G., *Perinatal Mortality*, 1963. Edinburgh.
- <sup>2</sup> *Safer Obstetric Care*, 1967. H.M.S.O., London.
- <sup>3</sup> Fleury, P. M., *Maternity Care*, 1967. London.
- <sup>4</sup> McEwan, E. D., *Lancet*, 1964, 2, 744.
- <sup>5</sup> Craig, G. A., and Muirhead, J. M. B., *Brit. med. J.*, 1967, 3, 520.
- <sup>6</sup> Richards, F. M., S.M.O., Maternal and Child Welfare, City of Cardiff Public Health Department, personal communication.
- <sup>7</sup> Rawlings, E. E., *Brit. med. J.*, 1968, 1, 642.
- <sup>8</sup> Kloosterman, G. J., *Ned. T. Geneesk.*, 1966, 110, 1808.
- <sup>9</sup> Figures from Central Bureau voor Statistiek in Nederland.
- <sup>10</sup> Verbrugge, H. P., *T. soc. Geneesk.*, 1965, 43, 315.