

# Use of maternity beds in a new general practitioner unit

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THE maternity department of the Princess Alexandra Hospital, Harlow, has a general-practitioner maternity unit of 22 beds adjacent to the main consultant unit of thirty-six. The general-practitioner beds were gradually brought into use from July 1965 and this report covers the first three complete years of operation (1966–1968), analysing approximately 1,600 cases.

All general practitioners on the obstetric list living within five miles of the hospital are eligible to use the unit. The average number has been 30 and represents all the principals and most of the assistants in an area which has a rising population, at present approximately 70,000. Nursing and other staff are provided by the hospital. General practitioners are primarily responsible for the care of their patients. The consultant obstetricians may only take over the management of the case at the request of the practitioner.

## Responsibilities of general practitioners

The practitioners have an honorary contract with the hospital management committee in which they agree to the conditions set out in a scheme of operation drawn up by the regional hospital board. They provide for their patients:

1. Full antenatal care during pregnancy.
2. Any necessary attention during confinement.
3. Any postnatal care considered necessary.

The regional board require that all patients needing specialist attention be transferred to the care of the consultant obstetricians, and that a consultant opinion must be sought in cases of puerperal pyrexia and third degree perineal laceration. The unit is administered by a committee consisting of four general practitioners, a consultant obstetrician, a consultant paediatrician and the superintendent of midwives. The local medical officer of health has also been co-opted.

## Administration of unit and case selection

The committee for administration has followed the recommendations made by the Royal College of Obstetricians and Gynaecologists in their publication of 1962. The following criteria for booking have been applied in the maternity unit as a whole:

### Group 1 (high-risk cases only to be booked in the consultant unit)

- (a) Women aged 36 and over
- (b) Primigravidae aged 30 and over, less than 5 ft tall or with gross obesity
- (c) Women with a parity of five or more
- (d) Women with a bad obstetric history
- (e) Women with major medical disorders

**Group 2 (intermediate risk suitable for booking in the general-practitioner unit)**

- (a) Primigravidae less than 30 years of age
- (b) Women with a parity of four (*i.e.* having fifth child)
- (c) Illegitimate pregnancies
- (d) Poor social conditions

**Group 3 (low risk suitable for booking for home confinement or in the general-practitioner unit if beds available)**

Multiparous women under 36 years of age with a parity of less than four

The consultant obstetrician as booking officer may examine all cases but the scheme has worked so well that this is seldom necessary. Routine booking examinations are made by the midwife in charge of the hospital antenatal clinic who initiates the hospital notes. Blood is taken at this visit for routine haematological examinations, and the chest is x-rayed in selected cases; copies of the reports are forwarded to the general practitioner and filed in the patient's hospital notes. Bookings are occasionally requested for patients that are ineligible but no practitioner has ever objected to such a patient being booked for confinement in the consultant unit.

The following complications of pregnancy and labour were regarded by the committee as indications for transfer to consultant care:

1. Toxaemia of pregnancy and eclampsia
2. Persistent malpresentation, including breech
3. Ante-partum haemorrhage
4. Severe anaemia not responding to treatment
5. Hydramnios
6. Unengaged head at term in primigravidae
7. Multiple pregnancy
8. Rhesus negative women developing antibodies
9. Prolonged labour
10. Premature labour.

**Clinical practice**

Standard systems for the care of the newborn were adopted in both consultant and general-practitioner maternity units on the advice of the consultant paediatrician, as also were the procedures recommended by the control of infection committee for the whole hospital. The central sterile supply department supplies both units. Practitioners have access to x-ray and pathology services and may call in any consultant in the appropriate specialty for a non-obstetric emergency.

Practitioners perform obstetric procedure during labour at their own discretion. Patients transferred to the consultant unit during labour are returned to the general practitioner unit as soon as possible following delivery if mother and baby are well.

All antenatal examinations are made by the practitioners on their own premises. The patients attend the hospital for booking at approximately the twelfth week and again at the thirty-second week when a second blood sample is taken. Arrangements are made at this time to show the patient around the unit. Prolonged pregnancy is regarded as a complication necessitating confinement in the consultant unit so that no surgical inductions of labour are performed in the general-practitioner unit.

*Case load*

Table I analyses the case load in the unit. Nearly half the primigravidae and a quarter of the multigravidae were transferred to the consultant unit either late in pregnancy or during labour.

**Results**

There were no maternal deaths, 17 stillbirths and 14 early neonatal deaths. Only four of these had not already been transferred to the consultant unit by the time of delivery. Thus the perinatal mortality for all general-practitioner unit booked cases was 19.1 but for cases actually delivered in the unit, 3.1. Almost all the patients were

resident in the Harlow Urban District for which the average mortality rate in the three years of the survey was 18.1. Eight deaths were due to congenital abnormalities, three to severe toxæmia early in pregnancy and four associated with multiple pregnancies. If, therefore, the statistical result appears to be worse than average for the district, this is not a reflection on the standard of obstetric care. These results confirm the observation of Hobbs and Acheson (1966) that a low perinatal mortality can be obtained in general-practitioner maternity units on the basis of selection of cases by the avoiding of booking high-risk categories. The findings of the British Perinatal Mortality Survey are also borne out in the high perinatal mortality amongst patients transferred to consultant care.

### Management of labour

Practitioners are informed of their patients admission and usually visit during labour. In their absence a deputy is informed. All practitioners are required, on appointment, to nominate a deputy. Labour is conducted by a hospital midwife and if an abnormality arises the practitioner is notified. Following the customary pattern of domiciliary confinements in Harlow, practitioners are seldom present at a normal

TABLE I  
CASE LOAD AND TRANSFER TO CONSULTANT UNIT

	1966	1967	1968	Total	Per-centage
Number booked ..	388	584	668	1,540	
Delivered in G.P. unit	260	351	428	1,039	63
Primigravidae booked ..	246	310	319	875	
Primigravidae delivered in G.P. unit ..	149	163	161	473	54
Multigravidae booked	142	274	349	765	
Multigravidae delivered in G.P. unit	111	188	267	566	74

TABLE II  
INDICATIONS FOR TRANSFER TO CONSULTANT UNIT DURING LABOUR

	No. of cases	Per-centage
Dystocia in first stage ..	56	28
Delay in second stage ..	46	23
Foetal distress .. ..	29	14
Breech presentation diagnosed during labour .. ..	15	7
Antepartum haemorrhage ..	12	6
Premature labour .. ..	11	5
Retained placenta .. ..	15	7
Postpartum haemorrhage ..	7	3
Others .. .. .	14	7
TOTAL .. .. .	205	100

delivery. In the period under review the practitioner was present at eight per cent of deliveries, but was called in in a further 32 per cent for the repair of perineal lacerations or episiotomies.

In the management of labour, practitioners are influenced by the proximity of the consultant unit and were quick to transfer suspected abnormalities. The indications for transfer during labour are set out in table II. Apparent dystocia in the first stage and delay in the second were the commonest reasons for transfer. Practitioners as a whole preferred not to perform forceps deliveries, and during the period under review only nine were performed in the general-practitioner unit, whilst a further 34 were performed within one hour of transfer by resident hospital staff in the consultant unit.

There were seven cases of postpartum haemorrhage, and 15 of retained placenta necessitating manual removal under general anaesthesia. All these were transferred

to consultant care. Also transferred following delivery were four cases of perineal and vulval haematoma and two cases requiring resuture of the perineum.

#### *Antenatal transfers*

Table III sets out the reason for transfer before the onset of labour. Prolonged pregnancy and toxæmia account for the majority. Cases of toxæmia were referred early to consultant care.

The incidence of undiagnosed breech presentation was higher than usually experienced despite the use of radiographs. On the advice of the consultant radiologist requests for radiographs have been reduced and practitioners are referring more patients with possible malpresentation to consultant obstetricians for clinical opinion. Although most practitioners were aware of the dangers inherent in the unengaged head at term in primigravidae a number of women with this condition were admitted in labour to the unit and subsequently transferred. The majority of these were primiparae.

TABLE III  
ANTENATAL INDICATION FOR TRANSFER TO CONSULTANT CARE

	<i>No. of cases</i>	<i>Percentage</i>
Prolonged pregnancy ..	100	33
Pre-eclampsia .. ..	88	28
Clinical disproportion ..	30	10
Breech presentation .. ..	20	7
Antepartum haemorrhage ..	19	6
Twin pregnancy .. ..	13	4
Others .. .. .	33	11
TOTAL .. .. .	303	100

#### *Management of transferred cases*

Of the patients transferred to the consultant unit in the period under review 135 required forceps deliveries, 42 caesarean section and another 43 were delivered by the breech. A large number of amniotomies was also performed. When the midwife was unable to contact the practitioner, she was empowered in an emergency to summon hospital resident medical staff and this occasionally was necessary in cases of foetal distress and asphyxia in the newborn.

#### **Comment**

In common with other general-practitioner maternity units it has been shown that a low perinatal mortality rate can be achieved by correct selection. The appointment of a consultant obstetrician as booking officer has ensured consistency in the agreed policy. The administrative arrangements have worked well, enabling practitioners to retain clinical independence whilst ensuring that patients with complications were under consultant care. This paper is not intended as a critical survey of the standard of obstetric care but to describe the use made by practitioners of the facilities provided. During the period under review it has been the accepted practice that patients remain in hospital for ten days following delivery. The occupancy of beds in the unit has not exceeded 60 per cent by patients under general-practitioner care. The excess have been taken up by consultant-unit booked cases enabling full use to be made of the unit. During the period of the survey almost all women resident in Harlow who wished to be confined in hospital have been able to obtain a bed.

#### REFERENCES

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