A combined maternity unit

A survey of the work done by general practitioners

- M. J. BARNARD, M.B., B.S., D.Obst.R.C.O.G., M.R.C.G.P.
- D. S. HALL, M.B., B.S., D.Obst.R.C.O.G., M.R.C.G.P.
- J. W. WOODWARD, M.B., B.S., D.Obst.R.C.O.G, D.C.H.
- D. R. J. QUICKENDEN, M.A., M.B., B.Chir., D.Obst.R.C.O.G. Sidcup, Kent

THE 56 bed Maternity Unit at Queen Mary's Hospital, Sidcup, was opened at the end of 1966. It is the first unit to be designed to admit both consultant and generalpractitioner cases. The scheme was started by Mr Basil Sanderson at St. Giles' Hospital in Camberwell, although during the war Professor J. Stallworthy at the Radcliffe Infirmary persuaded the Board of Governors to accept the concept that there should be beds set aside within the teaching hospital for the use of general practitioners. The development of separate general-practitioner units has been the policy in the Oxford Region more recently, and last year about 10,000 women were delivered in general-practitioner beds there. In 1968, K. L. Oldershaw and J. M. Brudenell reported on the first 500 general-practitioner cases delivered in St. Giles and Dulwich Hospitals, and shortly afterwards Professor P. Rhodes wrote about his experience with a similar scheme at the Lambeth Hospital. The general principles at our unit are similar to theirs in that only general practitioners on the obstetric list are invited to participate, and only women who would otherwise have been delivered under the care of their own doctor in their home or a general-practitioner maternity unit are considered suitable for booking without first seeking the approval of the consultant. The consultant retains overall responsibility for the patient and each general-practitioner obstetrician (GPO) has an honorary contract with the hospital. The details of the scheme have already been outlined by Oldershaw and Brudenell and our practice does not differ in any important way from theirs.

This paper presents an analysis of all the cases delivered in the Maternity Unit at Queen Mary's Hospital in 1968 which were booked initially under the GPO.

Booking

In 1968, 372 cases were booked by their general-practitioner and delivered in the

hospital. There were 31 social bookings and 23 women were discharged after 48 hours. Thirty-three GPO's were responsible for the cases under consideration. Only 17 doctors delivered more than one case a quarter in the hospital and 56 per cent of the work was done by seven doctors.

4			P	regnan	сy		
Age group	1	2	3	4	5	6	7
15-19 20-25 26-30 31-35 36-40	28 131 37 9	5 40 34 9 1	1 15 15 11 4	2 8 4 3	1 2 2 2	1 3 3	1

The ages and parity of the cases under consideration are

Age and parity

shown below. The elderly primigravidae and grande multiparae were booked with the consent of the consultant.

J. ROY. COLL. GEN. PRACTIT., 1970, 19, 211

Pregnancy

Seventy-three cases were transferred to the care of the consultant in pregnancy (19.6 per cent). The reasons for this are given below:

Pre eclamptic toxaemia (PET)	30	Unstable lie	1
Antepartum haemorrhage (APH)	10	Hydrocephalus	1
Breech	12	Narrow outlet	1
Premature rupture of the		Hyperemesis	1
membranes	3	Acute appendicitis	1
Postmaturity	1	Diabetes	1
Twins	4	Deep vein thrombosis	1
High head at term	4	Patient's request	1

PET and essential hypertension occurred in 62 cases. Thirty-two of these remained under the care of the GPO. Labour was induced surgically in 63 cases and 48 of the inductions were carried out by the GPO. The indications are shown in the table:

	Consultant	GPC
PET	13	22
Postmaturity	0	25
Breech	2	0
APH	0	0
Large baby	0	1

Forty patients remained under the GPO after he had induced them. The remaining eight were transferred in labour to the consultant.

Labour

Forty-one patients (11 per cent) were transferred in labour to the care of the consultant for the following reasons:

Foetal distress	18	Breech presentation	1
Delay in second stage	7	Placenta praevia	1
Retained placenta	5	Cephalopelvic disproportion	1
Brow presentation	2	For sterilization	1
Syntocinon infusion	2	Delay in the first stage	1
Third degree tear	2	,	

The GPO was present at the confinement of 56 per cent of the 257 patients for whom he was totally responsible. Attendance at confinement tended to be related to the distance from the unit and also appeared to be a question of practice policy as far as group practices were concerned. Three single-handed practitioners returned figures for attendance of 57, 57, and 54 per cent, while three group practices managed 73, 38, and 28 per cent.

Normal delivery occurred in 280 cases (75 per cent). There were 14 breech deliveries (1 in 26) and five twin deliveries (1 in 75).

Forceps delivery

Fifty-one babies were delivered by the forceps or ventouse (13.8 per cent). Ten of these deliveries were carried out by the general practitioner alone and he assisted at a further 15 of these confinements. The indications are given in the table below:

Indication	Consultant	GPO
Delay in labour	12 (2 by ventouse)	5
Foetal distress	16 (4 by ventouse)	2
Persistent occiput posterior (POP)	2 (both by Kielland's forceps)	2
Prematurity	2	1
PET	4	
Maternal distress	1	
Deep transverse arrest	4 (all by Kielland's forcens)	

Caesarean section

This was performed on 22 patients (5.9 per cent). The indications were as follows:

Foetal distress	7	Unstable lie	1
Placenta praevia	4	Hydrocephalus	1
Prolapsed cord	3	Cephalopelvic disproportion	1
Failed induction for PET	2	Acute appendicitis	1
Breech presentation	2	**	

Third stage abnormalities

The third stage is conducted routinely in our unit by the administration of syntometrine with the delivery of the anterior shoulder and cord traction. The comparatively low incidence of third-stage abnormalities may be due to the adoption of this technique.

Postpartum haemorrhage occurred in seven cases (1.9 per cent); two of these were already under the care of the consultant. Two were after the use of forceps by the GPO.

Retained placenta was recorded in eight cases (2.2 per cent). The GPO was present at six of these confinements.

Postpartum eclampsia followed a sudden rise in blood pressure in one patient although the antenatal period had been uneventful.

Foetal and perinatal abnormalities

Five babies were born with major congenital abnormalities. Two had cleft lip, two had hydrocephalus, and there was one mongol. In addition to these, one child was born with talipes equino varus and one with a port wine stain of the face. Twenty-six out of the total of 377 babies were under the weight of 5 lb 8 oz at birth and five of these were twins. Twenty-two children were nursed in the special care unit under the consultant paediatrician (6 per cent) for the following indications:

Prematurity	12	Cyanotic attacks	2
Shock following forceps	2	Fractured skull	1
Hypoglycaemia	2	Hypothyroidism	1
Feeding problem	2		

Neonatal abnormalities included a fractured skull following a difficult forceps delivery performed by the consultant. Facial weakness followed one forceps delivery and two babies developed a cephalhaematoma following a normal birth. These were two proven cases of hypoglycaemia which were managed by the consultant paediatrician. One baby was found to be hypothyroid and one developed neonatal scleroderma.

Perinatal mortality

There was one stillbirth and two neonatal deaths. A short account of each perinatal death is given below:

- Case 1. A primigravida, aged 28, was booked under the GPO and had a normal pregnancy up to 34 weeks. She then went into premature labour and was delivered of a macerated stillborn foetus. No drugs given during pregnancy could be implicated and postmortem was unable to determine the cause of death.
- Case 2. A 22-year-old primigravida presented at 30 weeks with oedema, albuminuria and hypertension. She was transferred to the consultant who induced her at 32 weeks. The child was delivered by the forceps and weighed 4 lbs. The Apgar Score was only 1 at birth and he died of respiratory distress at 72 hours.
- Case 3. A 33-year-old gravida 2 with a normal first pregnancy was transferred to the consultant at 33 weeks when twins had been diagnosed. She developed a constriction ring in labour between the head and shoulders of the second twin. The child was delivered by breech extraction under general anaesthesia. The Apgar Score was 1 at birth improving to 4 at five minutes, but the child only lived for 12 hours. The birth weight was 6 lbs.

Discussion

The rôle of the GPO has been changed by the increasing emphasis put on the hospital as the safest place for confinement. Domiciliary midwifery is bound to decline except in country areas where the patient may be far removed from suitable facilities. The concentration of maternity work in the hospitals may push the general practitioner out of obstetrics altogether and as the practice of the speciality requires an increasingly

up-to-date approach, some people feel that this might be the best solution. In their study of the Oxford area, M. S. T. Hobbs and E. D. Acheson have shown that there was a high rate of transferral of primigravidae in labour to the consultant unit (16.5 per cent). They have also shown that the perinatal mortality may be higher in general-practitioner maternity units. The perinatal mortality survey of 1958 also showed that the results of the GPO's were inferior to those of their specialist colleagues. Even the second pregnancy, which this survey of 1958 showed was the only one at less than average risk, cannot be predicted to be normal. The only alternative to losing the urban GPO would seem to be to encourage a new interest in obstetrics by bringing him into the hospital to work in close co-operation with the consultant and his staff. We hope to introduce the scheme which is already in operation in Cardiff whereby the local-authority midwife delivers her own cases in hospital. This continuity of care can only be in the best interests of both the patient and her midwife and might solve some of the staffing problems in the hospital service. It should be possible to achieve 100 per cent hospital confinement with an increase in the number of early discharges in the future.

When GPO's and consultants work side by side there are bound to be a few problems. The 'occasional obstetrician' may be tempted to take on more than he can manage without seeking the consent of the consultant. This can only give rise to a strained relationship. As Oldershaw has said, the GPO who cannot accept that the final responsibility lies with the consultant and that he is working under the direction of the consultant should realize that it would be safer for him to give up obstetrics. Rhodes' observation that the 'idea that general practitioners' were 'willing and able to care fully for their patients in labour' needed careful reappraisal was a valid one, but we have shown that when maternity work is put at a priority level in a group practice, a 73 per cent attendance at confinement is possible. No doubt with resident medical staff available there is a temptation for the GPO to pass a case over to their care unnecessarily. The clinical procedure committee, meeting regularly at the hospital, consists of consultants, GPO's and nursing staff and this body should be able to solve these problems and other difficulties of communication and discuss them with the GPO or consultant concerned. We believe that it should be possible for the general practitioner to do even more of the obstetric care for his patient with the consent of the consultant, but this demands a high degree of communication so that the consultant always knows exactly what is going on and feels he can trust the GPO concerned. With increasing co-operation, it might be possible for the consultant team to return more cases to the care of the general practitioner. As general practitioners, we have been impressed by the interest and help shown to us in the management of our cases and feel increasingly confident to undertake new procedures with the help of the consultant since we have been working in the unit. We have regular postgraduate study meetings when films and slides are shown and various topics are discussed with the consultants and registrars. This helps us to maintain an interest and keeps us up to date with advances in obstetrics.

It would appear from our experience that the combined maternity unit offers one satisfactory solution to the urban general practitioner who wishes to continue to provide maternity medical services.

Acknowledgements

We would like to thank the consultant obstetricians Mr Basil Sanderson and Miss M. A. Austin, their registrars Messrs Efiong and Baltoyannis, Miss M. Cole, the superintendent midwife and Miss M. Bierne the labour ward sister for all their help since the scheme began.

REFERENCES

Butler N. R. and Bonham D. G. (1958). Perinatal Mortality Survey. Hobbs M. S. T. and Acheson E. D. (1966). British Medical Journal. 1, 499. Hobbs M. S. T. and Acheson E. D. (1966). Lancet. 1, 761. Oldershaw K. (1965). British Medical Journal. 2, 1551. Oldershaw K. and Brudenell J. M. (1968). British Medical Journal. 3, 112. Rhodes P. (1968). British Medical Journal. 4, 509.