Middle Articles

GENERAL PRACTICE OBSERVED

Role of the General-practitioner Maternity Unit 1,000 Deliveries Analysed

A. J. M. CAVENAGH,* B.M., B.CH., D.OBST.R.C.O.G.

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The increasing trend towards hospital confinement in Britain will impose a severe strain on the nation's consultant obstetric units by the end of this decade. This is due in part to a rising birth rate, and also to a heightened awareness on the part of general practitioners of the classes of patient for whom hospital delivery is mandatory or advisable. Recent reports on perinatal mortality and on the planning of obstetric care have emphasized the importance of not confining such patients at home. Most of these cases are therefore referred to the nearest consultant unit. In considering the economy and necessity of this solution to the problem, it is relevant to assess the potential contribution which general-practitioner maternity units might make. At present the number of beds in such units is limited. However, the cost of building and maintaining these units may well be found to compare favourably with the cost of attempting to supply an equivalent number of beds in consultant units in district general hospitals.

Against this background the records of an isolated general-practitioner maternity unit may be of interest. The unit of six obstetric beds, together with labour ward suite, is situated in a 40-bedded cottage hospital in a market town in rural South Wales. At present antenatal in-patients are accommodated in the general female ward. An operating-theatre and normal x-ray facilities are available. Routine treatment and blood for transfusion are supplied by a general hospital 20 miles (32 km.) distant. Six pints (3.4 litres) of dried plasma are held in the cottage hospital, together with the usual fluids for intravenous infusion.

The unit serves a population of approximately 15,000, contained in an area of about 200 square miles (51,800 hectares), much of which is scheduled as "special district" for purposes of mileage assessment. Most of the population are contained in the market town and in two large villages some 8 miles (13 km.) distant. Eight general practitioners make use of the unit.

The first thousand deliveries in this unit have been analysed (Tables I and II), covering a period of seven years from 1957 to 1964. During this period an increasing proportion of the total local confinements have been conducted in the unit. Thus although some 450 domiciliary deliveries occurred in the surrounding district during the period of the survey, fewer than 50 of these took place in the second half of the period.

During the same interval approximately 30 deliveries were referred to consultant units outside the area. Consultant cover for the cottage hospital has traditionally been provided by a teaching hospital 40 miles (64 km.) distant. With this consultant unit relations have always been extremely cordial. The consultant has paid a monthly visit to the cottage hospital,

performed a list of operations, and held an out-patient clinic, to which obstetric problems are referred.

TABLE I.—Analysis of 1,000 Cases

Gravida	No. of Cases	Age	No. of Cases
1	398	< 20	114
2	297	20-24	338
3	156	25-29	270
4	69	30-34	176
5	36	35-39	86
5+	44	40+	16

Gravida 1 aged 35+ .. 14

		Clinical Outcome	
Normal delivery	732	Caesarean section	26
Episiotomy	85	Vacuum extraction	24
Forceps	56	Local anaesthetic	22
General anaesthetic	47	Surgical induction	22
Occipito-posterior	45	Manual removal of placenta	12
Puerperal sterilization	32	Twins	12
Post-partum haemorrhage	31	Placenta praevia	4
Toxaemia (requiring admission)	31	Ante-partum haemorrhage	3
		Perinatal deaths	27

Caesarean Section (Classical) Indications

Indication	No. of Cases	Indication	No. of Cases
Placenta praevia	4	Trial of labour	1
Previous section	4	Bad obstetric history	1
Lack of progress in first stage	3*	Short stature and previous difficult forceps	1
Foetal distress	2	Elderly primigravida	1
Transverse lie	2	Toxaemia, failed induction	1
Ante-partum haemorrhage	2	Records missing	2
Disproportion	2		

* Two aged over 35 years.

TABLE II.—Analysis of 27 Perinatal Deaths

Maturity	No. of Cases	Birth Weight	No. of Cases
29 weeks	1	2-3 lb. (0.9-1.32 kg.)	3
30	2	3-4 .. (1.32-1.80 ..)	6
32	3	4-5 .. (1.80-2.25 ..)	3
33	1	5-6 .. (2.25-2.70 ..)	4
35	2	6-7 .. (2.70-3.15 ..)	1
36	2	7-8 .. (3.15-3.60 ..)	3
37	2	8-9 .. (3.60-4.0 ..)	5
38	2	Unrecorded	2
39	1		
40	8		
41	1		
Unrecorded	2		

Additional Factors	No. of Cases	Additional Factors	No. of Cases
Toxaemia	8	Ante-partum haemorrhage	2
Foetal abnormality	5	Placenta praevia	1
Intrauterine death	3	Intrapartum haemorrhage	1
Occipito-posterior instrumental delivery	3	Short cord	1
		Low-lying placenta	1
		Neonatal pneumonia	1

Discussion

Table I comprises approximately 70% of the obstetric incidents in the population at risk during the period of the survey. It will be seen to include most of the common obstetric abnormalities and emergencies. Since both the deliberate

* General Practitioner, Brecon.

booking of the number of high-risk cases for delivery in a general-practitioner unit and the continued performance of classical caesarean section may be widely criticized, it is worth considering briefly how such practices have arisen.

Owing to geographical isolation the general practitioners concerned have always been prepared to deal with most of their emergency work themselves. Indeed, the area has probably attracted doctors who find this aspect of their work stimulating. The type of care demanded by obstetric emergencies—operative intervention, resuscitation, and post-operative care—does not differ qualitatively from that of other emergency work. The knowledge that some emergencies are bound to need operative care means that, to retain their skill, the doctors involved must deliberately undertake a certain amount of "cold" surgery. Similarly, in the knowledge that some obstetric emergencies will inevitably arise and demand immediate local treatment, they have made a habit of undertaking the complete obstetric care of the majority of their cases. Referrals for delivery in consultant units thus may appear to have been made on a somewhat inconsistent and illogical basis. The cases referred included five of rhesus iso-immunization; four normal deliveries for social reasons; three illegitimate pregnancies; three primigravid breech deliveries; elderly primigravidae, bad obstetric history, and trial of labour (two each); toxæmia and puerperal sterilization (one each); and also a case referred for delay in the first stage when her own doctor was unable to reach the patient's house because of snow.

Classical caesarean section is the operation with which the senior partner has become familiar during his thirty-odd years in practice, and he naturally continues to use it when indicated. Recently the lower-segment operation has also been performed. But it should be emphasized that only against a background of fairly continuous surgical and emergency work would the general practitioners in this area feel themselves to be justified—or indeed confident enough—to carry on with the present policy. Refresher courses of one sort or another provide a stimulating and instructive means of maintaining skill, but cannot replace continuous practice. Thus for 1965 the hospital casualty attendance figure was 3,604, and during the year 113 major operations were performed in the theatre by general-practitioner surgeons.

The results of the survey, as judged by perinatal mortality, bear comparison with the national figures during the time concerned, and are somewhat better than the regional ones. The 450 district deliveries during this period achieved a perinatal mortality rate of 25 per thousand, reflecting an insignificant improvement on that of the hospital booked cases, despite selection for hospital booking according to the generally accepted criteria.

The local general practitioners have become so impressed with the difficulty of predicting accurately which cases will have an uneventful confinement at home that hospital confinement is now offered to all mothers who will accept it. When allied to the promise of a 48-hour discharge the acceptance rate is high. Thus in 1965 203 cases were confined in the unit and only 13 at home. In an area of scattered population, with few telephones, there has been a marked improvement in the supervision of labour by doctors and also of doctor-attendance during the second stage, since the higher proportion of cases have been delivered in the unit. A secondary but important

consideration is that disruption of other general practice work is reduced when the majority of cases are confined in a well-staffed unit with good telephone facilities. The doctor, or his partner, can readily keep in touch. Since, by their practice agreement, six of the general practitioners undertake to live within five minutes' journey of the cottage hospital, help is never far away. Perhaps the general practitioners would all agree that this collaboration is the greatest advantage of all: discussion with colleagues, and the inevitable healthy criticism and competition which results, is a great source of strength, a stimulus to keep up to date, and a brake on errors of judgment.

Any conclusions based on the findings in a small series like this, and in circumstances which may be exceptional, must be tentative. Few general-practitioner maternity units will have the necessity to deal with such a wide variety of abnormal obstetrics as in this case. On the other hand, few will be placed at such a distance from consultant help and advice. Within the curtilage of a district general hospital general-practitioner obstetricians might well feel justified in assuming responsibility for a considerable proportion of their abnormal cases, in collaboration with their consultant colleagues.

From the figures given it appears that if general practitioners undertake care of a large proportion of their abnormal cases this need not be accompanied by an increased perinatal mortality. In particular, when contrasted with the district results, there is evidence that confinement in the general-practitioner maternity unit, as opposed to domiciliary delivery, is accompanied by an improved standard of obstetric care. Both these findings might well receive more general corroboration on a national scale if more beds in general-practitioner maternity units were available.

The economics of providing more beds in this way await elucidation. But architecturally these units need not be sophisticated. Medical staff can be provided by general-practitioner obstetricians, and it may prove possible for local authority midwives to assist in staffing them. (This is an important point, for the marked decrease in domiciliary work is imperilling the district midwife's field of activity, and she may rapidly lose her skill unless an adequate number of deliveries per annum are available to her.) The effects of providing better facilities for general practitioners to practise obstetrics, both on recruitment to general practice and on medical emigration, though outside the scope of this article, might prove to be considerable.

Summary

One thousand cases delivered in a rural general-practitioner maternity unit in South Wales are analysed. Despite the booking of a number of high-risk cases, 732 proceeded to a normal delivery. Perinatal mortality was 27. During the same time interval 450 low-risk cases delivered in the district had a perinatal mortality of 25 per thousand. The implications of this are discussed.

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