

General Practice Observed

Extended role for general practitioners in obstetrics? A medical audit

DAVID E SHAPLAND

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Summary and conclusions

A study was designed to evaluate provision of services, process of medical care, and outcome in four general-practitioner obstetric units in isolated areas (Berwick, Whitby, Guernsey, and Brecon). All units were equipped to induce labour; to perform instrumental vaginal delivery and selected breech deliveries; and to remove placentas manually. All had some fetal monitoring equipment. Caesarean sections could not be performed at Berwick and Whitby. Proportions of normal deliveries during 1976-7 varied from 75% to 93%. Perinatal mortality was acceptably low, as were transfer rates for neonates and mothers in labour.

With specialist help and particular attention to training and broadening local doctors' experience of abnormal obstetrics, such units should be able to provide an excellent obstetric service.

Introduction

What is the future of general-practitioner obstetrics? Has the general practitioner any place other than sharing in antenatal and postnatal care? Alternatively, will hospital practitioners become numerically important and perhaps fairly senior members of the consultant obstetric team? The answers to these questions may be political rather than medical, but this study was prompted by a wish to look at some existing samples of obstetric units run chiefly by general practitioners where an unusually complete range of work is being undertaken, and to try to decide what place, if any, such units have in modern obstetric service.

Good results can be obtained by general-practitioner obstetricians dealing with selected normal cases. Marsh¹ described 701 consecutive pregnancies over a 15-year period with an overall perinatal mortality rate (PNMR) of 8.5/1000 in an urban setting close to specialist help. The present study was designed to look at general-practitioner obstetrics in more isolated units, where some selected, abnormal cases were managed, by evaluating the provision of services, the process of medical care, and the outcome in terms of the well-being of mother and child.²

Methods

Four units were studied: Breconshire War Memorial Hospital, Brecon, Wales; Castle Hills Maternity Home, Berwick-on-Tweed, Northumberland; Eskdale Hospital, Whitby, North Yorkshire; and Princess Elizabeth Hospital, Guernsey, Channel Islands. Information was obtained by personal interview and discussion with medical, nursing, and administrative staff. Inevitably the need for confidentiality, both for patients and their doctors, limited access to some records and some answers were more an expression of opinion than well-documented facts.

Data were classified under three headings: input—facilities available to each unit; process—unit control, booking policy, self-assessment; outcome—overall pattern of practice and results for 1976 and 1977 (with the exception of Berwick, where figures for 1977 only were available).

Results

The units in Brecon and Guernsey were part of the local hospital, while those at Whitby and Berwick were in separate accommodation. With the exception of Guernsey, which formed part of the district hospital, the other units were 20-50 miles from the local district hospital. All were staffed by general-practitioner obstetricians, and all except Guernsey, which had general practitioners with the MRCOG, were visited regularly by consultant obstetricians. Specialist anaesthetists were available, and consultant paediatricians visited the two isolated units at Whitby and Berwick. Brecon had a poor liaison with a singlehanded paediatrician at the district hospital 20 miles away, and Guernsey relied on general practitioners with specialist qualifications. Resuscitation of the newborn was carried out by general practitioners, usually with anaesthetic or paediatric training. An epidural service was provided at Guernsey only, which was the only unit to have a cardiotochograph. All units had a Sonicaid monitor, and there was open access to sonar equipment in all the district hospitals except Guernsey. Open access to haematology and biochemical services was universal.

Although Brecon was designated as a general-practitioner unit, patients were booked by the consultant. All primigravidae were seen by him at 34-36 weeks, and other problems were referred directly and not via general practitioner obstetricians. Particular attention was paid to screening high-risk perinatal problems. A monthly informal "post-mortem" on all abnormalities was conducted as part of his regular visit, and simple annual maternity statistics were prepared by the nursing staff. The unit at Guernsey was open to any private practitioner, but midwives also conducted almost total obstetric care, with only one obligatory medical consultation. There was, therefore, no coherent booking policy. An up-to-date notebook on modern obstetric management was supplied to all practitioners using the unit. The results of a perinatal mortality survey for 1970-4 (prepared with guidance from Professor N Butler), were presented at an annual symposium in 1975. Whitby was officially designated as a consultant unit and acted as a branch of the district hospital at Scarborough. Day-to-day staffing was provided by three general practitioners acting as clinical assistants, who saw all patients in the booking clinic. The consultant visited weekly. Berwick, a general-practitioner unit, was also visited weekly by a consultant from the nearest hospital 50 miles away. He saw all bookings at 12 and 36 weeks. Caesarean sections were not carried out

Ruperra House, Brecon

DAVID E P SHAPLAND, FRCS, MRCOG, general practitioner

at Whitby or Berwick because they did not have full theatre facilities. All units were prepared and equipped to induce labour and to use oxytocin infusions; to perform instrumental vaginal delivery and selected breech deliveries; to remove placentas manually; and to perform puerperal sterilisation if appropriate.

The proportion of normal deliveries varied between 75% at Guernsey and 93% at Whitby and Berwick (table). This is probably because

Details of total deliveries in four general-practitioner obstetric units. Figures in parentheses are percentages of total deliveries

	Brecon		Guernsey		Whitby		Berwick
	1976	1977	1976	1977	1976	1977	1977
Total deliveries	147	153	626	583	187	186	185
Normal	115 (78)	119 (78)	483 (77)	439 (75)	176 (94)	173 (93)	173 (93)
Breech	3 (2)	5 (3)	21 (3)	17 (3)	6 (3)	4 (2)	0
Forceps/ventouse	20 (13)	15 (10)	66 (10)	66 (11)	5 (3)	9 (4)	12 (6)
Caesarean section	9 (6)	14 (9)	56 (9)	61 (10)			
Maternal transfers:							
Antenatal	3 (2)	2 (1)			15 (8)	12 (6)	13 (7)
In labour	0	0			9 (4)	8 (4)	14 (7)
Stillbirths	1 (0.7)	0	7 (1)	3 (0.5)	2 (1)	0	0
Neonatal deaths	1 (0.7)	0	8 (1)	3 (0.5)	0	0	0
Baby transfers	8 (5)	8 (5)	1 (0.2)	0	4 (2)	6 (3)	5 (2)
Perinatal mortality (per 1000)	13.9	0	24	10.2	10.6	0	0

Guernsey is a district hospital, while the two isolated units had a proportion of mothers who were transferred to hospital either antenatally or during labour. Few mothers were transferred from Brecon, but the numbers of forceps or ventouse deliveries and caesarean sections were higher than in the isolated units. The need for caesarean section at Berwick, for example, meant a flying squad from Newcastle-upon-Tyne 60 miles away, but fortunately this had only been required six times in 23 years. Stillbirths varied between 0 and 1.1% and neonatal deaths between 0 and 1.3%. Perinatal mortality was acceptably low (table). Roughly five babies a year were transferred from Whitby and Berwick and eight from Brecon. Reasons included prematurity, feeding difficulties, and respiratory problems.

Discussion

A major problem of this survey was finding out how many patients from the catchment areas of the four units were initially referred to district general hospitals. In Guernsey the care was total, and fortunately both Whitby and Brecon were each used by a single, large group practice and these two units provided for roughly 90% of all confinements. The figures, allowing for different degrees of case selection, were nevertheless reassuring, particularly the reasonably low transfer rates for mothers in labour and neonates, combined with the low perinatal mortality, which seemed to validate the booking policy in relation to the type of service and facility provided. Perinatal mortality may be useful in monitoring a unit's performance, since a rise may point either to inappropriate booking or to a lack of equipment or expertise. Crude transfer figures may not always accurately reflect the severity of a problem, as, for example, a mother transferred in labour may subsequently deliver easily and spontaneously in the district general hospital. In Brecon, cervicographic records of labour³ have been used routinely for four years, and indeed Philpott and Castle⁴ first developed this technique to help early identification of dystocic labour patterns in outlying, isolated units in Rhodesia.

Recently, an apparent conflict of interests in obstetrics has arisen between a rather vocal, consumer movement who demand more personal attention, with a return to natural childbearing,⁵ and the medical establishment of ever larger units with higher technology. The staff who I visited all agreed that mothers and their husbands preferred smaller units, but this argument would be greatly weakened by a greater risk of mortality or morbidity for mother or child. With the exception of Guernsey, the most worrying deficiency was the lack of paediatric cover at registrar level. A recent discussion document⁶ pointed out that this is a general problem. Most neonatal primary care in the UK

is undertaken by obstetric housemen, midwives, and anaesthetists, with little or no postgraduate paediatric experience. Furthermore, although 17% of all neonates require admission to special care baby units and 3% need intensive care, available staff is grossly deficient. The national deficiency of proper neonatal care is likely to be harder to correct in the smaller unit but the long-term goal must surely be to have a trained paediatrician available in all obstetric units.

In the isolated units many doctors recognised the difficulty of maintaining adequate experience in abnormal obstetrics. Concentrating the work so that one or two doctors dealt only with abnormal problems was essential. In some units regular clinical assistantships were provided in neighbouring district general hospitals. With close supervision by a consultant (or someone of similar status), scrupulous concern about standards and results, and particular attention to training and continuing experience of local doctors isolated general-practitioner units should be able to provide a first-class service for mothers and babies.

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Is it possible to reduce excessive salivation in a mobile, mentally defective 8-year-old boy? He shows no evidence of spasticity.

Drooling is a distressing symptom seen not infrequently in children with cerebral palsy or mental handicap, and is due usually to neuromuscular incoordination of tongue, lips, cheeks, and pharynx, resulting in defective swallowing. It is nearly always associated with poor speech and often causes skin maceration of chin and chest. Social acceptability is low and becomes lower with advancing age. It is often the prime factor dictating the request for medical intervention. Management is difficult and, apart from waiting for improvement with natural neurological maturation, few measures are totally successful. Conscious control by improving head posture, insisting on lip closure and swallowing, can lessen the symptom considerably, and speech therapists can make a valuable contribution. Unfortunately, there is quick deterioration once the volitional effort decreases. Some success has been claimed for operant conditioning procedures, such as encouraging swallowing before speech and giving verbal and monetary reward for successful performance. Parasympathetic blocking agents, such as atropine or its derivatives, are effective only when given in amounts that cause unacceptable side effects. Salivary gland irradiation has been attempted, but the effect is only temporary and secretory function returns. Surgical extirpation of the parotid glands is difficult and endangers the facial nerve. Ligation of the parotid duct can lead to parotitis or fistula formation, but transposition of the duct into the pharynx with removal of the submandibular gland helps some cases. ENT surgeons tend to advocate transtympanic neurectomy, but after initial pronounced reduction in salivary production some secretion returns after three or four months.