## CORRESPONDENCE

- All letters must be typed with double spacing and signed by all authors.
- No letter should be more than 400 words
- For letters on scientific subjects we normally reserve our correspondence columns for those relating to issues discussed recently (within six weeks) in the BMJ.
- We do not routinely acknowledge letters. Please send a stamped addressed envelope if you would like an acknowledgment.
- Because we receive many more letters than we can publish we may shorten those we do print, particularly when we receive several on the same subject.

## Obstetric accidents

SIR,—Ms M Ennis and Dr C A Vincent reviewed cases of obstetric accidents and questioned the adequacy of supervision of junior staff by consultants.¹ But they did not look at the timing of these accidents. As a result of our internal audit we have discovered that most suboptimal obstetric practice occurs when there is least senior cover—that is, during the "out of office hours" period of 5 pm to 9 am.

Currently there is a trend towards centralising deliveries in larger units, where there are adequate obstetric and anaesthetic staff and neonatal facilities are available. We think that this is a step in the right direction as it will allow increased levels of staffing and enable all pregnant women and their newborn babies to receive the best possible care. We believe, however, that to keep suboptimal obstetric practice to an absolute minimum and to provide a high level of care for every pregnant woman analysis of the nature of the out of hours work on the labour ward is important. We carried out such an analysis for the year 1989 in our tertiary maternity hospital, which caters for a large number of high risk obstetric patients.

Timing of obstetric workload in Birmingham Maternity Hospital during 1989

	9 am- 5 pm	5 pm- 11 pm	11 pm- 9 am
No of caesarean sections:			
Emergency	198	194	211
Elective	287	19	
No of straight forceps/ventouse			
deliveries	162	131	201
No of rotational forceps deliveries	45	34	35
Percentage of total workload	45.6	24.9	29.5
Percentage of emergency workload	33.4	29.7	36.9

The hospital has nine consultants, four senior registrars and lecturers, four registrars, and five senior house officers. Of the 4528 deliveries in 1989, 909 (20%) were by caesarean section and 1590 (35%) were carried out by doctors. Two thirds of the emergency work on the labour ward was carried out in the out of office hours period.

Society is generally becoming more litigious. As litigation is growing faster in obstetrics than in any other branch of medicine<sup>2,3</sup> and to provide a high level of care for every pregnant woman a detailed analysis of the out of hours emergency work on the labour ward should be taken into consideration. Tired doctors, deprived of their required amount of rest, may make decisions that in retrospect are in favour of their bodily needs rather than in the patient's best interests. We believe strongly that because obstetrics is a 24 hour emergency commitment shiftwork for those doctors providing

the "hands on" service on labour wards should be introduced; only then will obstetric accidents be reduced to an absolute minimum.

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- 1 Ennis M, Vincent CA. Obstetric accidents: a review of 64 cases. Br Med J 1990;300:1365-7. (26 May.)
- 2 Elstein M. Containment of litigation in obstetrics and gynaccology: prevention. Journal of the Medical Defence Union 1987;3:19-20.
- 3 Barnes J. Litigation in obstetrics and gynaecology. Journal of the Medical Defence Union 1987;2:10.

SIR,—In their article on obstetric accidents Ms M Ennis and Dr C A Vincent identify inadequate fetal monitoring as a major topic of concern and conclude that "middle and junior staff are inadequately trained in fetal heart monitoring and inadequately supervised in the labour ward."

We reviewed retrospectively all stillbirths occurring in hospitals in Mid Essex Health Authority in the three year period 1987-9. The notes for each case were examined independently by two clinicians who had not, in most instances, been associated with the case. Then, after formal discussion, a determination was made as to whether the stillbirth may have been preventable—that is, if there were factors in the patient's care that could have been avoided if normal good standards of obstetric and midwifery care were practised. The table gives the results.

The total number of stillbirths in the study period was 58 (4·8/1000 livebirths and stillbirths). A particular cause for concern is the very high number of stillbirths that were associated with decreased fetal movements reported by the patient but for which adequate management was not instigated—for example, referral for cardiotocography or consultant review. This factor occurred in all cases of stillbirth that entailed shared care with general practitioners and in four instances in hospitals when care was provided by a junior member of staff. The 15 other women who had

a stillbirth were all thought to have received inadequate care in the clinic, the antenatal ward, or the labour ward.

These results have implications for the implementation of good practice highlighted by the recent report on maternity services from the National Audit Office. We believe that in addition to clinical teaching written recommendations and protocols should be available for advising when tests for fetal wellbeing should be used and that guidelines on their interpretation should be circulated to all who take part in antenatal care. Such policies will never, of course, preclude discussion on a case by case basis, but it is intended that they will act as a minimum standard for staff, be immediately available at all times, and be regularly reviewed at consultant level.

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- 1 Ennis M, Vincent CA. Obstetric accidents: a review of 654 cases. Br Med J 1990;300:1365-7. (26 May.)
- 2 Comptroller and Auditor General. Maternity services. London: National Audit Office, 1990.

SIR,—The review by Ms M Ennis and Dr C A Vincent¹ of obstetric accidents was of interest to us. For many years we have supported and advised families who have complaints about obstetric care. Our aim is to get the best therapeutic outcome for the family, although this is often difficult because of the inadequacies of the complaints procedures in the NHS and their non-existence in private care. Some families are forced into litigation because they need to find out the truth in order to come to terms with what has happened. (Common causes of error may not be apparent from a study of case notes.)

Classification of stillbirths occurring in Mid Essex Health Authority as possibly preventable or not preventable depending on whether poor obstetric care may have been a causative factor

Preventable (n=32)		Not preventable (n=26)		
Causative factor	No of cases	Causative factor	No of cases	
Decreased fetal movements reported;		Congenital malformation	6	
cardiotocography not performed	17	Abruption	5	
Retardation of intrauterine growth not appreciated	5	Severe umbilical cord problems (excluding prolapse)	4	
Inadequate monitoring after induction of labour	3	Social factors – for example, late presentation	4	
Failure to monitor twins adequately	4	Prematurity	2	
Cardiotocogram misinterpreted	3	Others	5	