affair, unwanted pregnancy or the fear of it, bad reactions to a trip leading to fear of brain damage, or crippling anxiety reactions before or during an important examination. Having known the student and his family for some years, he is often in a good position to help, but to do so effectively he will need, with the student's permission, to contact college-based academic and medical personnel. Special help can often then be arranged—for example, examinations may be written in the health centre.

After the crisis the underlying problems may be appraised more leisurely, and some plans worked out for tackling them. These may include individual or group sessions with a therapist or counsellor (likely to be indicated when there is evidence of recurring neurotic difficulties); behavioural approaches in relation to specific problems; social skills training when there is a deficit in this area and skilled personnel are available to help; or intermittent supportive contact, enabling the position to be kept under review and further measures implemented subsequently if indicated. Drug treatments, in particular the benzodiazepines, are often invaluable for short-term help through a crisis, though little is known of their effects on academic performance. Any medication used during an examination should be thoroughly familiar to the student in terms of its effects, wanted and unwanted. No drug will control overwhelming anxiety, and temporary withdrawal from studies may be wiser.

Conclusions

The contemporary picture emphasises the interactive effects between the individual and the institution. The late adolescent

is engaged in complex developmental tasks. The institution provides recourses and makes demands which facilitate his development; but stimulus may become stress, particularly when the personal life of the individual becomes, for the time being, problematic. There is greater realisation of the differences in personality reactions to stimulus and stress, since each person interprets his life situation in a highly individual and complex way. Provision of help needs, therefore, concern and flexibility on the academic side, combined with individual therapeutic help using a range of methods.

References

- ¹ Mair, A, *Student Health Services in Great Britain and Northern Ireland*. London, Pergamon Press, 1967.
- ² Inter-Departmental Committee on Medical Schools, *Report*. London, HMSO, 1944. (Goodenough Report.)
- ³ Royal College of Physicians, *Student Health Services*, Interim reports, Social and Preventive Medicine Committee. London, RCP, 1943 and 1946.
- ⁴ Royal College of Physicians, *Student Health Services*, Report of Social and Preventive Medicine Committee. London, RCP, 1966.
- ⁵ Parnell, R W, *Lancet*, 1951, **1**, 731.
- ⁶ Carpenter, R G, *British Journal of Preventive and Social Medicine*, 1959, **13**, 163.
- ⁷ Rook, A, *British Medical Journal*, 1959, **1**, 599.
- ⁸ Payne, J, *Research in Student Mental Health*. London, Society for Research in Higher Education, 1969.
- ⁹ *Proceedings of the International Conference on Student Mental Health*, Princeton, New Jersey, ed D H Funkenstein. Cambridge, USA, Riverside Press, 1956.
- ¹⁰ Crown, S, Lucas, C J, and Supramaniam, S, *British Journal of Psychiatry*, 1973, **123**, 81.

For Debate

The general practitioner's role in the management of labour

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The Cranbrook Report¹ recommended that all general-practitioner obstetricians should have access to general-practitioner beds and that these should be close to consultant maternity beds. Since then there has been a progressive increase in hospital deliveries as a proportion of all deliveries, rising from just under 65% in 1960 to 80% in 1972.^{2,3}

During 1963-72 there was a linear regression in confinements managed by general practitioners, as indicated by a fall in the percentage of claims submitted for complete obstetric service (including confinement) expressed as a percentage of all claims.⁴ Nevertheless, in evidence to the subcommittee on domiciliary and maternity bed needs,⁵ general practitioners agreed overwhelmingly that they should be able to provide maternity services for their patients in hospitals or maternity units. While

many of them suggested that they should be integrated into the hospital maternity service to deal only with normal cases, most visualised themselves as working in totally separate units with overall responsibility for their patients.

The policy of making hospital maternity beds available for use by general practitioners continues to receive support. The philosophy underlying this policy is that suitably trained general practitioners should have the opportunity to look after their own "low-risk" patients not only in pregnancy but also in labour. This philosophy seems to be based on the assumption that those patients who are identified as being at low risk are unlikely to develop serious maternal or fetal complications in labour. We report the results of a retrospective study designed to determine the incidence of unexpected maternal and fetal emergencies arising during labour in low-risk patients.

Patients and methods

In 1973-5 the obstetric unit at Queen Mary's Hospital delivered babies to a total of 4106 patients. Of these women 1557 (37.9%) had undergone induction of labour for various obstetric indications and were therefore excluded from the study. The 2549 women who went into labour spontaneously remained in the study and constituted the estimated total number of low-risk patients. Those whose labours had

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Primigravidae aged 30 or over	Trial of labour
Grand multiparae	Unstable lie
Previous perinatal death	Antepartum haemorrhage
Pre-eclampsia	Malpresentation
Hypertension	Induction of labour
Placental dysfunction	Previous caesarean section
Chronic nephritis	Previous postpartum haemorrhage
Hydramnios	Previous retained placenta
Twins	

Characteristics excluded in order to define low-risk patients.

been complicated by primary postpartum haemorrhage, retained placenta, fetal distress, cord prolapse, or delivery of an infant in unexpectedly poor condition at birth were included in the study if their pregnancies had been classified as low-risk ones because none of the characteristics listed in the figure applied.

Primary postpartum haemorrhage was defined as a blood loss of 500 ml or more occurring within 24 hours of delivery. Retained placenta was defined as failure to deliver the placenta by controlled cord traction within 20 minutes of delivery of the infant, which necessitated manual removal under either general or epidural anaesthesia. Fetal distress was diagnosed when, in the opinion of the obstetrician, immediate operative delivery was indicated on the basis of one or more of the following criteria: (a) a sustained (baseline) fetal bradycardia of 120 beats/min or less; (b) periodic delayed-onset fetal heart decelerations (Hon type II dips) on the cardiotocograph; (c) fetal acidosis, with a fetal scalp blood sample pH of 7.2 or less; (d) heavy meconium staining of the liquor. An infant was defined as being in an unexpectedly poor condition at birth when he needed intermittent positive pressure ventilation at one minute of life and there had been no preceding signs of fetal distress during labour.

Results

Results are summarised in the table. The incidence of all emergencies in labour in this low-risk group of women was 7.1%, of which 3.0% were maternal emergencies and 4.1% were fetal emergencies.

Incidence of emergencies in labour

	No (%) of mothers or fetuses
Estimated No of women at low risk	2549 (100)
<i>Maternal emergencies</i>	
Primary postpartum haemorrhage	62 (2.4)
Retained placenta	15 (0.6)
Total maternal emergencies	77 (3.0)
<i>Fetal emergencies</i>	
Fetal distress in 1st stage	8 (0.3)
Fetal distress in 2nd stage	76 (3.0)
Cord prolapse	5 (0.2)
Infants in poor condition at birth	15 (0.6)
Total fetal emergencies	104 (4.1)

Discussion

It has been accepted that pregnant women who have been assessed as having a low risk of obstetric complications, on the basis of established epidemiological and clinical criteria, are suitable for care in labour by their general-practitioner obstetricians. Clearly, however, even in this low-risk group of women, there is a small but significant incidence of unexpected fetal and maternal emergencies in labour. While all these emergencies require prompt and often operative intervention, the early recognition of potential fetal emergencies also requires intensive care throughout labour by staff who are fully conversant with the techniques and interpretation of cardiotocography and fetal blood pH determinations. Such intensive care of their own

patients throughout labour by general practitioners would seem to be incompatible with the competing demands of their other responsibilities.

Previous studies on the use of general-practitioner obstetric beds in consultant units have shown that relatively few general practitioners actually attended their own patients in labour when provided with the opportunity to do so. Oldershaw and Brudenell⁶ reported that general practitioners were present at 40% of deliveries of patients under their care, while Rhodes⁷ found that 48% of patients were visited during the first stage of labour by their general practitioner. More recently Wilkes *et al.*,⁸ in their survey of general practitioners holding the DOBstRCOG, found that the mean number of women personally attended in labour annually was 13, while the mean number of confinements for which general practitioners were responsible annually was 31.

In practice, midwives carry the main responsibility for providing the intensive care of patients in labour and for conducting normal deliveries. They are ideally suited for this by virtue of their training, their continuing experience, and the fact that they have no conflicting commitments. When problems arise in labour midwives find it easier and quicker to obtain medical help from members of the hospital obstetric team, who have the full range of specialist skills at their disposal, rather than from a general practitioner who may be difficult to locate, or otherwise committed, and whose technical skills may be limited.

Conclusion

We believe that there is no place in modern hospital obstetric practice for the independent general practitioner to provide care for his own patients in labour. Instead, there should be facilities for suitably trained general practitioners to participate in intrapartum care on a regular and committed sessional basis, as integrated members of the consultant-run obstetric team.

References

- 1 Ministry of Health, *Report of the Maternity Services Committee*. London, HMSO, 1959. (Cranbrook Report.)
- 2 Ministry of Health, *Annual Reports 1960-67*. London, HMSO, 1961-8.
- 3 Department of Health and Social Security, *Annual Reports 1968-72*. London, HMSO, 1969-73.
- 4 Lloyd, G, *British Medical Journal*, 1975, **1**, 79.
- 5 Department of Health and Social Security, Standing Maternity and Midwifery Advisory Committee, *Report of Subcommittee on Domiciliary Midwifery and Maternity Bed Needs*, p 108. London, HMSO, 1970.
- 6 Oldershaw, K L, and Brudenell, J M, *British Medical Journal*, 1968, **3**, 112.
- 7 Rhodes, T, *British Medical Journal*, 1968, **4**, 509.
- 8 Wilkes, E, Dickson, R A, and Knowlden, J, *British Medical Journal*, 1975, **4**, 687.

Is there any relation between BCG immunisation in schoolchildren and subsequent diabetes mellitus? In a class of 24 teenage schoolgirls two developed diabetes shortly after receiving BCG vaccine.

Prior BCG immunisation has not previously been associated with the clinical onset of diabetes. The occurrence of diabetes in two of a class of 24 teenagers is consistent with several reports of almost simultaneous onset in sibs. This temporal and geographical clustering, when taken in the context of other epidemiological, immunological, and experimental data, supports increasing evidence that viruses play a part in the aetiology of human diabetes. Postulated modes of action are: (1) direct destruction of islet-cells by pancreatrophic viruses; (2) islet-cell damage by autoimmune processes secondary to infection, and (3) the nonspecific stress of infection precipitating overt disease in latent diabetics. In this instance BCG vaccination may have acted by a nonspecific stress-inducing mechanism.