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REFERENCES

Acheson, E. D. (1964). Brit. J. prev. soc. Med., 18, 8.
—— and Evans, J. G. (1964). Proc. roy. Soc. Med., 57, 269.
Godber, Sir G. (1963). Lancet, 1, 1061.
Ministry of Health Report of the Maternity Services Committee (1959).
H.M.S.O., London.

Early Discharge of Maternity Patients

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For many years the consultant obstetric staff of St. Mary's Hospital had sought to arrange for a selected number of their patients to be discharged early in the puerperium. The reasons for this were twofold. Firstly, the belief that there are some patients who should be delivered in hospital for medical reasons who yet neither merit nor, in many cases, wish for full hospital stay. Secondly, such a scheme would make more efficient use of the limited number of obstetric beds then available.

Efforts to initiate such a scheme had failed because of the natural reluctance of district midwives to accept more than the occasional hospital patient for puerperal care at home. However, in 1960 a temporary reduction occurred in the number of maternity beds during the rebuilding of our maternity department. This was at a time when, in the London area, there was a serious increase in the number of unbooked obstetric cases, admission for which could be obtained only through the Emergency Bed Service.

This combination of factors provided the opportunity to ask for and obtain the co-operation of the London County Council authorities to operate an early discharge scheme from St. Mary's Hospital for an experimental period. This was initially for one year, but the results were encouraging enough to all concerned for the scheme to be continued. The results of the first three years form the basis of this paper (see Table I).

TABLE I

	lst Yr.	2nd Yr.	3rd Yr.	Total
No. of cases initially booked for early discharge No. cancelled before delivery No. sent home after 48 hours	137	118	122	377
	40 (29%)	25 (20%)	11 (9%)	76
	80	80	99	259

Selection of Cases.—Our cases were selected geographically from the area of the domiciliary midwifery practice of St. Mary's Hospital. Suitable patients from this area were chosen by the hospital staff at the first antenatal visit and booked subject to a satisfactory report by the domiciliary midwife on their home and social conditions. In the early months of this scheme these patients were mainly those who attended too late to be allocated a bed and who would otherwise have had to be "booked" with the Emergency Bed Service. As the scheme became known both patients and general practitioners began to request it themselves early in pregnancy. Table II shows the reasons for cancellation of a certain number of patients between booking and delivery. It appears that a certain wastage is inevitable. The selected patients were mainly multigravidae whose previous obstetric history merited hospital delivery but for whom full hospital stay did not appear to be

essential. As opportune, a certain number of primigravidae were included, as were a few multigravidae who would not normally have been allocated a hospital booking but expressed concern about a home confinement.

TABLE II.—Reasons for Cancellation Before Delivery

	lst Yr.	2nd Yr.	3rd Yr.
Home conditions considered unsuitable Change of address to area outside that covered	8	9	7
by this scheme Full stay offered elsewhere, or alternative	9	3	1
arrangements made by patient	13	4	_
Miscarriages	3	4	
District confinements	2	1	
•	40	25	11

Antenatal Care.—Once a patient was accepted the general practitioner was notified and invited to co-operate in the arrangements by taking over the intermediate antenatal care of the patient and her care in the puerperium. If the practitioner agreed to this the patient attended the antenatal clinic only at 30 and 36 weeks, otherwise her entire supervision was undertaken by the hospital staff. The majority of practitioners in the area preferred this latter arrangement.

Labour.—Of the 259 (Table I) patients sent home after 48 hours, 242 had uneventful labours. Among the remaining 17 there were five forceps deliveries, three retained placentae, and nine postpartum haemorrhages. All these patients were fit to be discharged at the end of 48 hours.

Puerperium.—Table III gives the reasons for prolonging the hospital stay of certain patients who were initially booked for early discharge. As stated above, we did not consider that forceps delivery or third-stage complications in themselves merited full stay in hospital. Patients sent home after 48 hours were provided with a small pack of suitable dressings. At the time of discharge the practitioner and domiciliary midwives

TABLE III.—Reasons for Full Stay

	lst Yr.	2nd Yr.	3rd Yr.
Investigation of albuminuria	1		_
Severe concealed accidental haemorrhage	2	1	
Investigation of persistent puerperal pyrexia	1	1	_
Extensive second-degree laceration	1	_	-
Lower-segment caesarean section	4	4	2
Change of address discovered after delivery	3	1	
Third-degree prolapse in puerperium	1		l —
Hypertension	2	2	1
Diseases of infant and prematurity	2	3	5 -
Social reasons	_	1	1
Puerperal psychosis		_	1
Maternal chest infection	_		1
Severe thrombophlebitis	_	-	1
	17	13	12

Indications for caesarean section: placenta praevia 2, foetal distress 2, breech presentation 2, prolapsed cord 2, severe toxaemia 1, malpresentation 1.

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were notified. Thereafter for the next eight days the patients were visited daily by the midwives, every second day by the obstetric house-officer, and at least once by the registrar or consultant.

Readmission to Hospital.—Six patients required readmission to hospital. There were two cases of puerperal pyrexia—one due to infection of the genital tract and the other of unknown aetiology which resolved within 24 hours. There were two cases of late post-partum haemorrhage on the ninth and thirteenth days. Exploration of the uterine cavity was performed on both occasions, but no placental tissue was found. The remaining two admissions were related to the baby. In one the child was admitted to the paediatric department with a breast abscess. The other infant was admitted on the twelfth day of life with sudden respiratory distress. Death occurred within 24 hours, and post-mortem examination showed a severe congenital heart lesion to be present. It was thought at the commencement of this scheme that the change of environment might lead to difficulties in the establishment of breast-feeding. In fact, this was not our experience.

Discussion

The success of any early discharge scheme is entirely dependent on the smooth co-operation between the general practitioner, the domiciliary midwife, and hospital staff. Ideally such a scheme will be wholly acceptable only if administrative arrangements can be made to allow either the domiciliary midwife to come into the hospital and deliver her patients for early discharge or the hospital midwife to undertake the home visiting of these patients. It is appreciated that there are many interests and responsibilities which would need careful evaluation should either of these schemes be accepted.

Considerable help has been obtained in some areas by the use of part-time domiciliary midwives who are willing to carry out the necessary puerperal visits without the added commitment of attending the confinement. This is a field which may usefully be explored further.

For the hospital, any major scheme to discharge patients early will throw a heavy burden on the existing staff and labour ward facilities. This must be fully appreciated and allowed for before anything other than the most modest scheme is undertaken.

From the practitioner's point of view it is essential that there be good liaison with the hospital staff. The use of personal antenatal cards has been of great value. It is of interest that practitioners who initially accepted this scheme with reservations are now actually requesting it for some of their patients. There is a danger that in areas in which the general-practitioner obstetrician can only just obtain the necessary number of domiciliary patients to maintain his obstetric experience, any increase in the number of hospital confinements may be to his detriment.

With respect to the patient, the advantage of being able to return home early presents a strong appeal to those who dislike separation from home and family longer than is medically necessary. This attitude may be intensified if other young children are left at home and are unable to enter into the new domestic scene from the beginning. It is essential that, via family, friends, or home help, there is sufficient assistance to ensure adequate rest for the mother during the remainder of her lying-in period.

At the moment patients discharged early are at a disadvantage as no home maternity grant is available, and thus they are put to extra expense in providing for both personal dressings and domestic help. We have partly overcome this difficulty by supplying, through the hospital, a prepared pack containing suitable dressings. If, however, there is to be any extension of this scheme with official approval it would seem reasonable to expect legislation to permit payment of some proportion of the home grant.

Two groups of patients seem to be ideally suited for early discharge from hospital. Firstly, those who wish to have a home confinement but for medical reasons are recommended for hospital delivery; such patients include those with a previous history of forceps delivery, pre-eclamptic toxaemia, or third-stage complications. Secondly, those who are desperately anxious to have their baby in hospital but do not qualify for a bed under the present criteria.

With regard to the optimum time of discharge from hospital, we accepted the view expressed in the Cranbrook report (Ministry of Health, 1958) that this was after 48 hours. Our experience has led us to support this view.

We realize that the early discharge of maternity patients has been recommended and practised by other obstetric units in the past (Foster, 1957; FitzGerald, 1959; Theobald, 1959). In the Bradford experiment 26% of all patients were sent home from hospital after 48 hours. All patients booked for hospital confinement were warned that they might be discharged early, but the final selection was left until after delivery. We feel, however, that it is more desirable for the patient to be selected for early discharge in the antenatal period so that she can make the necessary domestic arrangements.

Summary

The purpose of this paper is to record the results of a three-year trial carried out at St. Mary's Hospital with early discharge of selected maternity patients. These show that for both mother and baby the scheme is safe and desirable. Of the 377 patients chosen for this scheme, 259 were sent home 48 hours after delivery, 76 were cancelled for medical and social reasons prior to delivery, and 42 remained in hospital for full stay. Four mothers and two babies required readmission after early discharge.

The problems and difficulties encountered are discussed and certain proposals made regarding further extension and elaboration of the scheme. These have taken into consideration the parts played by the domiciliary midwife, the general practitioner, the hospital staff, and the patient herself.

This scheme, if developed gradually and more widely, would make better use of the available maternity beds. Furthermore, the voluntary early discharge of selected patients should be an accepted part of the maternity services in this country.

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REFERENCES

FitzGerald, T. B. (1959). Lancet, 1, 403.
Foster, D. S. (1957). Brit. med. J., 1, 1120.
Ministry of Health (1958). Maternity Services Committee (Cranbrook Report). H.M.S.O., London.
Theobald, G. W. (1959). Brit. med. J., 2, 1346.