The safety of early postpartum discharge: a review and critique
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Authors’ objectives
To determine the effect of early postpartum discharge (less than 48 hours after vaginal birth or 96 hours after Caesarean delivery) on maternal and neonatal complications, maternal concerns, patient satisfaction, and cost-savings.

Searching
MEDLINE was searched from 1996 to January 1997 for papers published in the English language, using the keywords 'length of stay', 'pregnancy', postpartum' and 'early discharge'. The bibliographies of the retrieved articles were reviewed for additional papers, as were those of major obstetric texts and a recent (1995) published symposium.

Study selection
Study designs of evaluations included in the review
Any study design was eligible for inclusion in the review. In practice, randomised controlled trials (RCTs), cohort studies, case-control studies and case series were included. There does not appear to have been any restrictions on the length of follow-up required in the studies.

Specific interventions included in the review
Early postpartum discharge (less than 48 hours after vaginal birth or 96 hours after Caesarean delivery) was compared with traditional discharge periods (usually around 4 days’ duration). Trials of early postpartum discharge, defined as 3 days after vaginal birth, were excluded.

Participants included in the review
Pregnant women, generally with no important prenatal complications and uncomplicated deliveries, were included.

Outcomes assessed in the review
Four primary outcomes were assessed:

- maternal and neonatal complications requiring readmission and out-patient visits;
- maternal concerns, including fatigue, anxiety and self-confidence after delivery;
- patient satisfaction, usually in relation to the length of stay and quality of care; and
- cost-savings, in terms of the reduction in total charges for the in-patient stay and any out-patient follow-up and visits.

How were decisions on the relevance of primary studies made?
The authors do not state how the papers were selected for the review, or how many of the authors performed the selection.

Assessment of study quality
The evidence was categorised using the US Preventive Services Task Force rating scale (see Other Publications of Related Interest), which although not a validity assessment tool per se, does rank studies in terms of their design (from Class I for RCTs to Class III for case series, case reports, expert opinion). The authors do not state how the papers were assessed for validity, or how many of the authors performed the validity assessment.

Data extraction
The authors do not state how the data were extracted for the review, or how many of the authors performed the data extraction.
Methods of synthesis
How were the studies combined?
The studies were discussed narratively, assigning a grade for the strength of the recommendation for early postpartum discharge for each of the four primary outcomes. A grade A recommendation (good evidence) was assigned when early postpartum discharge was superior to or equal to a longer stay in well-designed studies; grade B reflected less rigour (fair evidence); and grade C indicated that there was insufficient evidence to make any recommendation.

How were differences between studies investigated?
No sensitivity analysis appears to have been conducted.

Results of the review
Five RCTs (n=620), 10 cohort studies (n=69,978), 1 case-control study (n=117), and 12 case-series reports (n=11,298) were included in the review.

Maternal and neonatal safety: a grade B recommendation was given in support of early discharge for a well-selected population of patients who received adequate pre-natal education and experienced normal spontaneous vaginal deliveries without complications. The families should have also agreed to early dismissal and received sufficient home visits and other follow-up. For patients not meeting the above qualifications, the recommendation was grade C (insufficient evidence).

A grade C recommendation was given for the effect of early discharge on maternal concerns (anxiety, confidence in mothering skills, depression), patient satisfaction and cost-savings, due to the lack of available evidence.

Cost information
Three identified studies examined the cost implications of early discharge. However, these were found to provide inadequate evidence with which to evaluate cost-savings.

Authors’ conclusions
The existing evidence was insufficient to judge the safety and practicality of early discharge. The existing evidence suffered from serious methodological flaws, including selection bias, limited power, and the exclusion of patients after randomisation. Further research is required to resolve the question.

CRD commentary
This was a relatively well-conducted review with a clear aim and explicit inclusion criteria. The validity assessment procedure used to rank the studies in terms of their design and the methodological quality were discussed in some detail. The poor quality of the evidence, and the heterogeneity of the studies in terms of their design and content, indicates that a narrative discussion was the appropriate strategy to take. The main flaw in the review was the use of a fairly limited search strategy (only one database for the period of one year), which may have resulted in retrieval bias (missing eligible studies) and publication bias (no attempt to identify unpublished material). Further details of the primary studies could also have been provided. Nevertheless, based on the identified evidence, the authors’ conclusion that the use of early discharge requires further evaluation does appear to be appropriate.

Implications of the review for practice and research
The authors suggest that a well-designed RCT with sufficient power is required to fully evaluate the safety and practicality of early discharge.