

# Redesigning postnatal care: a randomised controlled trial of protocol-based midwifery-led care focused on individual women's physical and psychological health needs

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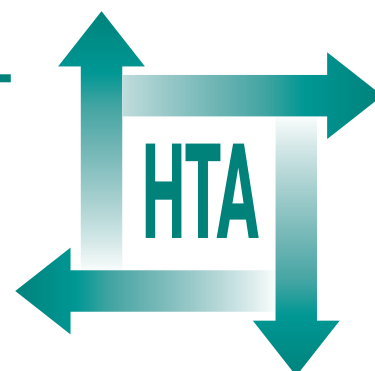
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## Executive summary

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## Executive summary

### Objectives

This study aimed to develop, implement and test the cost-effectiveness of a new model of postnatal care compared with current care on women's physical and psychological health.

### Design

This was a cluster randomised controlled trial, with general practice as the unit of randomisation. Recruited women were followed up by postal questionnaire at 4 and 12 months postpartum and further data collected from midwife and general practice sources.

### Setting and subjects

Thirty-six general practice clusters were randomly selected and recruited from all those in the West Midlands Health Region and 17 randomly allocated to intervention and 19 to control. All antenatal women within recruited practices were eligible for inclusion, unless not expected to be resident for postnatal care. Attached midwives recruited 1087 women in the intervention and 977 in the control practice clusters.

### Intervention

The redesigned care focused on the identification and management of women's health problems and was midwifery-led with general practitioner (GP) contact only if required. Symptom checklists were used at the first home visit, 10 and 28 days, and the Edinburgh Postnatal Depression Scale (EPDS) at 28 days, to maximise identification of problems. This allowed care to be planned, with visit content and frequency flexibly tailored to need, rather than routine. Evidence-based guidelines, including clear GP referral criteria, were developed by the team to assist midwifery management of problems. Care duration was extended, with home visits to 28 days and discharge check at 10–12 weeks, the latter also undertaken by the midwife, who again administered the checklist and EPDS.

### Main outcome measures

The primary outcomes were women's health at 4 and 12 months, assessed by the Physical and Mental Component Scores (PCS and MCS) of the Short-Form 36 (SF-36), and the EPDS. Secondary outcomes were women's views about care, reported morbidity at 12 months, health service usage during the year, 'good practice' indicators and health professionals' views about care.

### Results

At 4 months postpartum the mean MCS and EPDS scores were significantly better in the intervention group and the proportion of women with an EPDS score of 13+ (indicative of probable depression) was lower relative to controls. Mean PCS did not differ. Assessments of women's views about care were either more positive in the intervention group or did not differ.

At 12 months, MCS and EPDS scores remained significantly better among intervention group women. Fewer women in the intervention group reported depression, fatigue and haemorrhoids as present at 12 months in the intervention group, with no differences for other reported morbidities. GP consultation rates during the year were reduced in the intervention group. Secondary care referrals to medical and surgical specialities did not differ. There were more secondary care contacts with professions allied to medicine (PAMs) in the intervention group but more PAM primary care contacts in the control group. Breastfeeding continuation, contraceptive advice and child immunisation did not differ. The intervention midwives were more satisfied with redesigned care than control midwives were with standard care. The GPs' and health visitors' views about postnatal care did not differ. Intervention care was cost-effective since outcomes were better and costs did not differ substantially.

### Conclusions

The redesigned community postnatal care led by midwives and delivered over a longer period

resulted in an improvement in women's mental health at 4 months postpartum, which persisted at 12 months and at equivalent overall cost. Subject to consideration and evaluation of local issues of implementation, the evidence would, in the authors' opinion, justify this form of care as standard for postnatal women.

### Research recommendations

It is suggested that further research should focus on: the identification of postnatal depression through screening; whether fewer adverse longer term effects might be demonstrated among the children of the women who had the intervention care relative to the

controls; testing interventions to reduce physical morbidity, including studies to validate measures of physical health in postpartum women. Further research is also required to investigate appropriate postnatal care for ethnic minority groups.

### Publication

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