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Midwife-led versus other models of care for childbearing women

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Abstract

Background
Midwives are primary providers of care for childbearing women around the world. However, there is a lack of synthesised information to establish whether there are differences in morbidity and mortality, effectiveness and psychosocial outcomes between midwife-led and other models of care.

Objectives
To compare midwife-led models of care with other models of care for childbearing women and their infants.

Search strategy
We searched the Cochrane Pregnancy and Childbirth Group's Trials Register (January 2008), Cochrane Effective Practice and Organisation of Care Group's Trials Register (January 2008), Current Contents (1994 to January 2008), CINAHL (1982 to August 2006), Web of Science, BIOSIS Previews, ISI Proceedings, (1990 to 2008), and the WHO Reproductive Health Library, No. 9.

Selection criteria

All published and unpublished trials in which pregnant women are randomly allocated to midwife-led or other models of care during pregnancy, and where care is provided during the ante- and intrapartum period in the midwife-led model.

Data collection and analysis
All authors evaluated methodological quality. Two authors independently checked the data extraction.

Main results
We included 11trials (12,276 women). Women who had midwife-led models of care were less likely to experience antenatal hospitalisation, risk ratio (RR) 0.90, 95% confidence interval (CI) 0.81 to 0.99), the use of regional analgesia (RR 0.81, 95% CI 0.73 to 0.91), episiotomy (RR 0.82, 95% CI 0.77 to 0.88), and instrumental delivery (RR 0.86, 95% CI 0.78 to 0.96) and were more likely to experience no intrapartum analgesia/anaesthesia (RR 1.16, 95% CI 1.05 to 1.29), spontaneous vaginal birth (RR 1.04, 95% CI 1.02 to 1.06), to feel in control during labour and childbirth (RR 1.74, 95% CI 1.32 to 2.30), attendance at birth by a known midwife (RR 7.84, 95% CI 4.15 to 14.81) and initiate breastfeeding (RR 1.35, 95% CI 1.03 to 1.76). In addition, women who were randomised to receive midwife-led care were less likely to experience fetal loss before 24 weeks' gestation (RR 0.79, 95% CI 0.65 to 0.97), and their babies were more likely to have a shorter length of hospital stay (mean difference -2.00, 95% CI -2.15 to -1.85). There were no statistically significant differences between groups for overall fetal loss/neonatal death (RR 0.83, 95% CI 0.70 to 1.00), or fetal loss/neonatal death of at least 24 weeks (RR 1.01, 95% CI 0.67 to 1.53).

Authors' conclusions
All women should be offered midwife-led models of care and women should be encouraged to ask for this option.

Plain language summary

Midwife-led versus other models of care for childbearing women
Midwife-led care confers benefits for pregnant women and their babies and is recommended.

In many parts of the world, midwives are the primary providers of care for childbearing women. Elsewhere it may be medical doctors or family physicians who have the main responsibility for care, or the responsibility may be shared. The underpinning philosophy of midwife-led care is normality and being cared for by a known and trusted midwife during labour. There is an emphasis on the natural ability of women to experience birth with minimum intervention. Some models of midwife-led care provide a service through a team of midwives sharing a caseload, often called 'team' midwifery. Another model is 'caseload midwifery', where the aim is to offer greater continuity of caregiver throughout the episode of care. Caseload midwifery aims to ensure that the woman receives all her care from one midwife or her/his practice partner. By contrast, medical-led models of care are where an obstetrician or family physician is primarily responsible for care. In shared-care models, responsibility is shared between different healthcare professionals.

The review of midwife-led care covered midwives providing care antenatally, during labour and postnatally. This was compared with models of medical-led care and shared care, and identified 11 trials, involving 12,276 women. Midwife-led care was associated with several benefits for mothers and babies, and had no identified adverse effects. The main benefits were a reduced risk of losing a baby before 24 weeks. Also during labour, there was a reduced use of regional analgesia, with fewer episiotomies or instrumental births. Midwife-led care also increased the woman's chance of being cared for in labour by a midwife she had got to know. It also increased the chance of a spontaneous vaginal birth and initiation of breastfeeding. In addition, midwife-led care led to more women feeling they were in control during labour. There was no difference in risk of a mother losing her baby after 24 weeks. The review concluded that all women should be offered midwife-led models of care.