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[Intervention Review]

Midwife-led continuity models versus other models of care for childbearing women

Jane Sandall¹, Hora Soltani², Simon Gates³, Andrew Shennan¹, Declan Devane⁴

¹Division of Women's Health, King's College, London, Women's Health Academic Centre, King's Health Partners, London, UK. ²Centre for Health and Social Care Research Centre, Sheffield Hallam University, Sheffield, UK. ³Warwick Clinical Trials Unit, Division of Health Sciences, Warwick Medical School, The University of Warwick, Coventry, UK. ⁴School of Nursing and Midwifery, National University of Ireland Galway, Galway, Ireland

Contact address: Jane Sandall, Division of Women's Health, King's College, London, Women's Health Academic Centre, King's Health Partners, 10th Floor, North Wing, St. Thomas' Hospital, Westminster Bridge Road, London, SE1 7EH, UK. jane.sandall@kcl.ac.uk.

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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 continuity models and other models of care.

Objectives

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

Search methods

We searched the Cochrane Pregnancy and Childbirth Group's Trials Register (28 January 2013) and reference lists of retrieved studies.

Selection criteria

All published and unpublished trials in which pregnant women are randomly allocated to midwife-led continuity models of care or other models of care during pregnancy and birth.

Data collection and analysis

All review authors evaluated methodological quality. Two review authors checked data extraction.

Main results

We included 13 trials involving 16,242 women. Women who had midwife-led continuity models of care were less likely to experience regional analgesia (average risk ratio (RR) 0.83, 95% confidence interval (CI) 0.76 to 0.90), episiotomy (average RR 0.84, 95% CI 0.76 to 0.92), and instrumental birth (average RR 0.88, 95% CI 0.81 to 0.96), and were more likely to experience no intrapartum analgesia/anaesthesia (average RR 1.16, 95% CI 1.04 to 1.31), spontaneous vaginal birth (average RR 1.05, 95% CI 1.03 to 1.08), attendance at birth by a known midwife (average RR 7.83, 95% CI 4.15 to 14.80), and a longer mean length of labour (hours) (mean

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difference (hours) 0.50, 95% CI 0.27 to 0.74). There were no differences between groups for caesarean births (average RR 0.93, 95% CI 0.84 to 1.02).

Women who were randomised to receive midwife-led continuity models of care were less likely to experience preterm birth (average RR 0.77, 95% CI 0.62 to 0.94) and fetal loss before 24 weeks' gestation (average RR 0.81, 95% CI 0.66 to 0.99), although there were no differences in fetal loss/neonatal death of at least 24 weeks (average RR 1.00, 95% CI 0.67 to 1.51) or in overall fetal/neonatal death (average RR 0.84, 95% CI 0.71 to 1.00).

Due to a lack of consistency in measuring women's satisfaction and assessing the cost of various maternity models, these outcomes were reported narratively. The majority of included studies reported a higher rate of maternal satisfaction in the midwifery-led continuity care model. Similarly there was a trend towards a cost-saving effect for midwife-led continuity care compared to other care models.

Authors' conclusions

Most women should be offered midwife-led continuity models of care and women should be encouraged to ask for this option although caution should be exercised in applying this advice to women with substantial medical or obstetric complications.

PLAIN LANGUAGE SUMMARY

Midwife-led continuity models versus other models of care for childbearing women

In many parts of the world, midwives are the main providers of care for childbearing women. Elsewhere, it may be obstetricians or family physicians that have the main responsibility for care; or the responsibility may be shared. The philosophy behind midwife-led continuity models is normality, continuity of care and being cared for by a known, trusted midwife during labour. The emphasis is on the natural ability of women to experience birth with minimum intervention. Midwife-led continuity of care can be provided through a team of midwives who share the caseload, often called 'team' midwifery. Another model is 'caseload midwifery', which aims to ensure that the woman receives all her care from one midwife or her or his practice partner. Midwife-led continuity of care is provided in a multi-disciplinary network of consultation and referral with other care providers. This contrasts with medical-led models of care where an obstetrician or family physician is primarily responsible for care. In shared-care models, responsibility is shared between different healthcare professionals.

In this review we included models of care where midwives provided care throughout the pregnancy, and during labour and after birth. We identified 13 studies involving 16,242 women both at low and increased risk of complications. Midwife-led continuity of care was associated with several benefits for mothers and babies, and had no identified adverse effects compared with models of medical-led care and shared care. The main benefits were a reduction in the use of epidurals, with fewer episiotomies or instrumental births. Women's chances of being cared for in labour by a midwife she had got to know, and having a spontaneous vaginal birth were also increased. There was no difference in the number of caesarean births. Women who received midwife-led continuity of care were less likely to experience preterm birth, or lose their baby before 24 weeks' gestation, although there were no differences in the risk of losing the baby after 24 weeks, or overall. All trials included licensed midwives, and none included lay or traditional midwives. No trial included models of care that offered out of hospital birth.

The review concludes that most women should be offered midwife-led continuity models of care, although caution should be exercised in applying this advice to women with substantial medical or obstetric complications.