

Systematic review of the clinical outcomes of midwife-led care

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Aim

- To describe a systematic review and meta-analysis of randomised trials of midwife-led models of care compared with other models of care for childbearing women

Methods

- Comprehensive literature searches were undertaken across 12 electronic databases.
- All citations were screened independently by two reviewers and duplicate independent data extraction was performed on all included studies.
- The risk of bias of included studies was assessed independently by two reviewers.
- Data were synthesised using a fixed-effect model of meta-analysis .

Methods

- Our search identified 5733 unique citations corresponding to 29 studies for potential inclusion.
- Of the 29 potentially eligible studies, 17 RCTs were included. Included studies varied in the (i) scope of model of care (antenatal and intranatal with or without postnatal care and intranatal with or without postnatal care), (ii) maternal risk status (low and mixed risk status) and (iii) midwife-led work organisational models (caseload and team models of midwife-led care)

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Findings

- Findings indicate that women randomised to midwife-led care were significantly less likely than women randomised to other models of care to have:
 - Amniotomy
 - Augmentation/artificial oxytocin during labour
 - Regional analgesia (epidural/spinal)
 - Opiate analgesia
 - Instrumental vaginal birth (forceps/vacuum)
 - Episiotomy

Findings

- Women randomised to midwife-led care were significantly more likely than women randomised to other models of care to have:
 - Attendance at birth by known midwife
 - Spontaneous vaginal birth
 - No intrapartum analgesia/anaesthesia
 - Longer labours
 - High perceptions of control during labour and childbirth

Findings

- There was *no* statistically significant difference between women randomised to midwife-led models of care and women randomised to other models of care in:
 - Mean number of antenatal visits
 - Antenatal hospitalisation
 - Antepartum haemorrhage
 - Fetal loss/neonatal death before 24 weeks
 - Fetal loss/neonatal death equal to/after 24 weeks
 - Overall fetal loss and neonatal death
 - Induction of labour

Findings

- There was *no* statistically significant difference (continued):
 - Caesarean birth
 - Intact perineum
 - Perineal laceration requiring suturing
 - Postpartum haemorrhage (as defined by trial authors)
 - Maternal death
 - Duration of postnatal hospital stay (days)
 - Postpartum depression
 - Breastfeeding initiation
 - Prolonged backache

Findings

- Infants of women randomised to midwife-led care had significantly *shorter* lengths of neonatal hospital stay.
- There was no statistically significant difference between infants of women randomised to midwife-led models of care and infants of women randomised to other models of care in:
 - Low birth weight
 - Preterm birth
 - 5-minute Apgar score below or equal to 7
 - Admission to special care nursery/neonatal intensive care unit
 - Neonatal convulsions

Conclusion

- Based on the evidence contained in this review, the majority of women will benefit from midwife-led models of care, including models that have and do not have an antenatal component, without any adverse consequences for them or their infants.
- The clear benefit and absence of evidence of harm maintains that midwife-led models of care should become the dominant model of care for childbearing women.

Thank you

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