TITLE: Management of Childbirth by Midwives: Clinical Evidence and Guidelines

DATE: 13 June 2013

RESEARCH QUESTIONS

1. What is the clinical evidence regarding the management of childbirth by midwives in the home versus in the hospital?

2. What are the evidence-based guidelines regarding the management of home childbirths by midwives?

KEY MESSAGE

Three systematic reviews and thirteen non-randomized studies were identified regarding the management of childbirth by midwives in the home versus the hospital; no evidence-based guidelines regarding the management of home childbirths by midwives were identified.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2013, Issue 4), University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and major international health technology agencies, as well as a focused Internet search. Methodological filters were applied to limit retrieval to health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies and guidelines. The search was also limited to English language documents published between Jan 1, 2008 and May 30, 2013. Internet links were provided, where available.

The summary of findings was prepared from the abstracts of the relevant information. Please note that data contained in abstracts may not always be an accurate reflection of the data contained within the full article.
RESULTS

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by randomized controlled trials, non-randomized studies, and evidence-based guidelines.

Three systematic reviews and 13 non-randomized studies were identified regarding the management of childbirth by midwives in the home versus in the hospital. No health technology assessments or randomized controlled trials (RCTs) were identified. No evidence-based guidelines regarding the management of home childbirths by midwives were identified. Additional references of potential interest are provided in the appendix.

OVERALL SUMMARY OF FINDINGS

Three systematic reviews were identified comparing midwife management of home childbirth compared with hospital childbirth. One systematic review included only one RCT, which found that, in low-risk women, there was no strong evidence favouring either planned hospital birth or planned home birth. A systematic review of three meta-analyses concluded that, in low-risk women, midwife care resulted in better maternal outcomes, reduced number of procedures in labour, and increased patient satisfaction compared with physician-led care. No adverse outcomes were associated with midwife care. It was not stated in the abstract if the midwife care was specific to home births or hospital births. A third systematic review found that planned home births resulted in fewer maternal interventions (e.g., epidural analgesia, episiotomy, hemorrhage, and infections), but "were associated with significantly elevated neonatal mortality rates."3

Thirteen non-randomized studies were identified.4-16

- Most studies found that there was a reduced risk of medical interventions for planned home births compared with hospital births.5,6,8,10,14,15,16
- One study found an increased risk of postpartum hemorrhage for planned hospital births compared with planned home births.7
- One study concluded that healthy, low-risk women should be offered the choice of home birth, and another study concluded that there was a high degree of safety associated with both midwife-attended home and birth centre births.4
- Five studies found that home births were not associated with increased intrapartum or early neonatal death.9,13,14,15,16
- One study stated that there should be better adherence to risk assessment with access to timely transfer to hospital if needed.10
- One study found that home births resulted in lower number of adverse perinatal outcomes, but higher incidence of both abnormal labours and low five-minute Apgar scores.12
- One study associated midwife-assisted home births with higher risk for neonatal mortality than midwife-assisted hospital deliveries.11

No relevant evidence-based guidelines were identified.
REFERENCES SUMMARIZED

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses


Randomized Controlled Trials
No literature identified.

Non-Randomized Studies


Guidelines and Recommendations
No literature identified.

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APPENDIX – FURTHER INFORMATION:

Systematic Reviews – Hospital setting only


Non-Randomized Studies – No comparator


Consensus Statements and Policies


See Document: Indications for Planned Place of Birth


Review Articles


Additional References


PubMed: PM22963692

PubMed: PM22925396

PubMed: PM20129227