



September 2009 – SUPPORT Summary of a systematic review

Does giving women their own case notes to carry in pregnancy improve maternal care?

Improvements in antenatal care have included changes to traditional practices in order to improve women's experience of antenatal care and the clinical outcomes of maternity care. One such change has been giving women their own clinical case notes to carry throughout their pregnancy in order to enable women to participate in the decision making regarding their health care, and to improve the availability of the records when needed.

Key messages

- **Women who carry their own case notes probably feel more in control and involved in decision making about their care, and want to carry their notes again in subsequent pregnancies.**
- **Women's satisfaction with antenatal care and the number of assisted deliveries may increase when women carry their own case notes.**
- **Women carrying their own case notes during pregnancy may not lead to any changes in smoking cessation, availability of complete antenatal records at the time of delivery, loss of case notes, or breastfeeding initiation.**
- **These findings are based on a few small trials in high-income countries. Factors which should be considered in applying the findings of this review in LMIC settings include:**
 - Access to and utilisation of antenatal care;
 - Literacy rates of women and care providers may be a factor which could influence the impact of the intervention;
 - Support by health professionals and others of women's rights to be involved in decision making about clinical care during pregnancy.



Who is this summary for?

People making decisions concerning improvements to antenatal and maternal care

! This summary includes:

- **Key findings** from research based on a systematic review
- **Considerations about the relevance of this research** for low- and middle-income countries

X Not included:

- Recommendations
- Additional evidence not included in the systematic review
- Detailed descriptions of interventions or their implementation

This summary is based on the following systematic review:

Brown HC, Smith HJ. Giving women their own case notes to carry during pregnancy. Cochrane Database of Systematic Reviews 2004. Issue 2. Art. No.: CD002856. DOI: 10.1002/14651858.CD002856.pub2.

What is a systematic review?

A summary of studies addressing a clearly formulated question that uses systematic and explicit methods to identify, select, and critically appraise the relevant research, and to collect and analyse data from the included studies.

SUPPORT – an international collaboration funded by the EU 6th Framework Programme to support the use of policy relevant reviews and trials to inform decisions about maternal and child health in low- and middle-income countries.
www.support-collaboration.org

Glossary of terms used in this report:
www.support-collaboration.org/summaries/explanations.htm

Background references on this topic:
See back page.

Background

In seeking better ways to deliver antenatal care, giving women their own clinical case notes to carry during pregnancy has several potential benefits. It is perceived as empowering to women and could facilitate greater participation in clinical care decisions. When women move from one facility to another, it could also ensure that the records are available and that all healthcare providers write in one record, potentially reducing clinical error and improving continuity of care. It has also been hypothesised that women who take responsibility for their own case notes will exhibit other improved health behaviours such as reduced smoking, improved breastfeeding and a reduced need for analgesia in labour. Although this is already practised in high, middle and low income settings, evidence of its effectiveness is not widely available.

This summary is based on a systematic review first published in 2004 by Brown et al and updated in 2008, assessing the effects of giving women their own case notes to carry during pregnancy in studies conducted in high income countries.

How this summary was prepared

After searching widely for systematic reviews that can help inform decisions about health systems, we have selected ones that provide information that is relevant to low- and middle-income countries. The methods used to assess the quality of the review and to make judgements about its relevance are described here: www.support-collaboration.org/summaries/methods.htm

Knowing what's not known is important

A good quality review might not find any studies from low- and middle-income countries or might not find any well-designed studies. Although that is disappointing, it is important to know what is not known as well as what is known.

About the systematic review underlying this summary

Review objective: To evaluate the effects of women carrying their own case notes during pregnancy

	What the review authors searched for	What the review authors found
Interventions	Randomised controlled trials of interventions in which pregnant women were given their own case notes to carry during pregnancy	Three RCT's in which pregnant women were given their complete antenatal records to carry and control groups were given a co-op card (short summary card with no clinical progress information)
Participants	Pregnant women	Pregnant women recruited at their first antenatal booking visit
Settings	Antenatal care services	Antenatal care services within the public health sector in the UK (2) and Australia (1)
Outcomes	Primary: maternal satisfaction and control, administrative efficiency Secondary: partner involvement, health related behaviours, clinical outcomes	Primary: maternal satisfaction and control (3), administrative efficiency information (2) Secondary: Breastfeeding initiation (1), smoking cessation (2), and clinical outcomes (1)

Date of most recent search: June 2007

Limitations: This is a good quality systematic review with only minor limitations.

Brown HC, Smith HJ. Giving women their own case notes to carry during pregnancy. Cochrane Database of Systematic Reviews 2004. Issue 2. Art. No.: CD002856. DOI: 10.1002/14651858.CD002856.pub2.

Summary of findings

Three randomised control trials in high income countries assessed the effects of women carrying their own case notes compared to women carrying a co-op card, a short summary card with no clinical progress information.

1) Maternal satisfaction and control

Two trials reported on women’s feeling of control and involvement in decision making, one reported on satisfaction with antenatal care received, and all three reported on the proportion of women who wanted to carry their own case notes in a subsequent pregnancy.

- Women who carry their own clinical case notes probably feel more in control and involved in decision making about their care;
- Carrying own case notes may slightly improve women’s satisfaction with care;
- Women who carry their own clinical notes would probably want to do so again in subsequent pregnancies.

About the quality of evidence (GRADE)

⊕⊕⊕⊕

High: Further research is very unlikely to change our confidence in the estimate of effect.

⊕⊕⊕○

Moderate: Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.

⊕⊕○○

Low: Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.

⊕○○○

Very low: We are very uncertain about the estimate.

For more information, see last page

Maternal satisfaction and control					
Patients or population: Pregnant women Settings: Antenatal services in the public health sector in UK and Australia Intervention: Women carrying their own clinical case notes during pregnancy Comparison: Women carrying abbreviated co-op cards with no clinical follow up information					
Outcomes	Comparative risks*		Relative effect (95% CI)	Number of participants (studies)	Quality of the evidence (GRADE)
	Without women carrying notes	With women carrying notes			
Women felt in control	52 per 221 (23.5%)	87 per 229 (38%)	RR 1.56 (1.18 to 2.06)	450 (2 studies)	⊕⊕⊕○ Moderate
Satisfaction with care	58 per 102 (56.9%)	66 per 95 (69.5%)	RR 1.22 (0.99 to 1.52)	197 (1 study)	⊕⊕○○ Low
Want to carry case notes in subsequent pregnancy	133 per 269 (49.4%)	242 per 283 (85.5%)	RR 1.79 (1.57 to 2.03)	552 (3 studies)	⊕⊕⊕○ Moderate

CI: Confidence interval RR: Risk ratio GRADE: GRADE Working Group grades of evidence (see above and last page)

2) Behavioural and clinical outcomes

None of the studies assessed partner involvement directly. Two studies assessed smoking cessation, one assessed breastfeeding initiation, and one assessed clinical outcomes (such as assisted deliveries, use of epidural analgesia, miscarriages, stillbirths, and neonatal deaths). Data for smoking cessation was not provided, and its effect was reported in the narrative of the review. The studies found that giving women their case notes to carry:

- May lead to more assisted deliveries;
- May not lead to any change in epidural analgesia usage;
- May not result in any change in smoking cessation or breastfeeding initiation;
- May not result in any change in rates of miscarriages, or stillborn and neonatal deaths.

Behavioural and clinical outcomes					
Patients or population: Pregnant women Settings: Antenatal services in the public health sector in UK and Australia Intervention: Women carrying their own clinical case notes during pregnancy Comparison: Women carrying abbreviated co-op cards with no clinical follow up information					
Outcomes	Comparative risks		Relative effect (95% CI)	Number of participants (studies)	Quality of the evidence (GRADE)
	Without women carrying notes	With women carrying notes			
Assisted delivery	17 per 108 (15.7%)	30 per 104 (28.8%)	RR 1.83 (1.08 to 3.12)	212 (1 study)	⊕⊕○○ Low
Epidural analgesia	29 per 108 (26.9%)	40 per 104 (38.5%)	RR 1.43 (0.96 to 2.13)	212 (1 study)	⊕⊕○○ Low
Miscarriage	7 per 108	8 per 104	RR 1.19 (0.45 to 3.16)	212 (1 study)	⊕⊕○○ Low
Stillborn or Neonatal death	2 per 108	2 per 104	RR 1.04 (0.15 to 7.24)	212 (1 study)	⊕⊕○○ Low
Breastfeeding initiation	81 per 105 (77.1%)	77 per 98 (78.6%)	RR 1.02 (0.88 to 1.18)	203 (1 study)	⊕⊕○○ Low

CI: Confidence interval RR: Risk ratio GRADE: GRADE Working Group grades of evidence (see above and last page)

3) Administrative Efficiency

Administrative efficiency was used by the review to describe the extent to which the intervention ensured that records were available. None of the trials reported on the availability of the records at the time of delivery. Two trials assessed whether the intervention impacted on loss of notes.

→ Carrying own clinical case notes may not result in any difference in loss of case notes.

Administrative efficiency: women retaining notes and bringing case notes to consultations					
Patients or population: Pregnant women					
Settings: Antenatal services in the public health sector in UK and Australia					
Intervention: Women carrying their own clinical case notes during pregnancy					
Comparison: Women carrying abbreviated co-op cards with no clinical follow up information					
Outcomes	Comparative risks*		Relative effect (95% CI)	Number of participants (studies)	Quality of the evidence (GRADE)
	Without women carrying notes	With women carrying notes			
Loss of records	15 per 178 (8.4%)	6 per 169 (3.6%)	0.38 (0.04–3.84)	347 (2)	⊕⊕○○ Low
CI: Confidence interval RR: Risk ratio GRADE: GRADE Working Group grades of evidence (see above and last page)					

Relevance of the review for low- and middle-income countries

→ Findings

▷ Interpretation*

APPLICABILITY

→ The interventions were conducted in antenatal services of the public health sector in high-income countries

▷ *The results could be applicable in low and middle-income country settings with accessible antenatal services which are utilised by women. Case notes may take different formats such as summaries of maternal health record or antenatal records in different contexts.*

EQUITY

→ The included trials did not provide data regarding differential effects of the interventions for disadvantaged populations

▷ *The intervention had an empowering effect on women in their feeling in control and involvement in decision making regarding their care. This effect may be less in populations which do not have accessible antenatal care services, high adult literacy levels or where medical care and cultural norms do not support women's involvement in decision making relating to their clinical care during pregnancy.*

ECONOMIC CONSIDERATIONS

→ The trials did not include any economic evaluations

▷ *There may be some additional costs involved in providing records for women to carry, as well as potentially increased costs associated with more assisted deliveries. However, the efficiency and cost gains from reduced lost records need to be considered as well. Future studies should include economic evaluations, and local costing would be important prior to implementation.*

MONITORING & EVALUATION

→ Data on the effects of women-held antenatal records are limited and inconclusive, especially on outcomes such as partner involvement, behaviour change, record keeping, and clinical outcomes

▷ *Further studies are needed on the effects of women-held clinical case records in different settings. Implementation of this intervention in maternity care should therefore be monitored and evaluated carefully.*

*Judgements made by the authors of this summary, not necessarily those of the review authors, based on the findings of the review and consultation with researchers and policymakers in low- and middle-income countries. For additional details about how these judgements were made see: <http://www.support-collaboration.org/summaries/methods.htm>

Additional information

Related literature

Elbourne D, Richardson M, Chalmers I, Waterhouse I, Holt E. The Newbury Maternity Care Study: a randomised controlled trial to assess a policy of women holding their own obstetric records. *British Journal of Obstetrics and Gynaecology* 1987;94:612-9.

Homer CSE, Davis GK, Everitt LS. The introduction of a woman health record into a hospital antenatal clinic: the bring your own records study. *Australian and New Zealand Journal of Obstetrics and Gynaecology* 1999; 39(1): 54-7.

Lovell A, Zander LI, James CE, Foot S, Swan Av, Reynolds A. The St Thomas's Hospital maternity case notes study: a randomised controlled trial to assess the effects of giving expectant mothers their own maternity case notes. *Paediatrics and Perinatal Epidemiology* 1987; 1:57-66.

This summary was prepared by

Lilian D Dudley, Charles Shey Wiysonge, South African Cochrane Centre, Medical Research Council, South Africa

Conflict of interest

None declared. For details, see: www.support-collaboration.org/summaries/coi.htm

Acknowledgements

This summary has been peer reviewed by: Heather Brown, UK; Mario Festin, Switzerland; Lelia Duley, UK; Esperança Sevene, Alda do Rosário Elias Mariano and Julie Cliff, Mozambique.

This summary should be cited as

Dudley LD, Wiysonge CS. Does giving women their own clinical case notes to carry during pregnancy improve maternal care? A SUPPORT Summary of a systematic review. September 2009. www.support-collaboration.org/summaries.htm

Keywords

All Summaries: evidence-informed health policy, evidence-based, systematic review, health systems research, health care, low- and middle-income countries, developing countries, primary health care.

About quality of evidence (GRADE)

The quality of the evidence is a judgement about the extent to which we can be confident that the estimates of effect are correct. These judgements are made using the GRADE system, and are provided for each outcome. The judgements are based on the type of study design (randomised trials versus observational studies), the risk of bias, the consistency of the results across studies, and the precision of the overall estimate across studies. For each outcome, the quality of the evidence is rated as high, moderate, low or very low using the definitions on page 3.

For more information about GRADE:

www.support-collaboration.org/summaries/grade.htm

SUPPORT collaborators:

The Alliance for Health Policy and Systems Research (HPSR) is an international collaboration aiming to promote the generation and use of health policy and systems research as a means to improve the health systems of developing countries. www.who.int/alliance-hpsr

The Cochrane Effective Practice and Organisation of Care Group (EPOC) is a Collaborative Review Group of the Cochrane Collaboration: an international organisation that aims to help people make well informed decisions about health care by preparing, maintaining and ensuring the accessibility of systematic reviews of the effects of health care interventions.

www.epocoslo.cochrane.org

The Evidence-Informed Policy Network (EVIPNet) is an initiative to promote the use of health research in policymaking. Focusing on low- and middle-income countries, EVIP-Net promotes partnerships at the country level between policy-makers, researchers and civil society in order to facilitate both policy development and policy implementation through the use of the best scientific evidence available. www.evipnet.org

For more information:

www.support-collaboration.org

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