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[Intervention Review]

Group versus conventional antenatal care for women

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ABSTRACT

Background

Antenatal care is one of the key preventive health services used around the world. In most Western countries, antenatal care traditionally involves a schedule of one-to-one visits with a care provider. A different way of providing antenatal care involves use of a group model.

Objectives

1. To compare the effects of group antenatal care versus conventional antenatal care on psychosocial, physiological, labour and birth outcomes for women and their babies.
2. To compare the effects of group antenatal care versus conventional antenatal care on care provider satisfaction.

Search methods

We searched the Cochrane Pregnancy and Childbirth Group's Trials Register (31 October 2014), contacted experts in the field and reviewed the reference lists of retrieved studies.

Selection criteria

All identified published, unpublished and ongoing randomised and quasi-randomised controlled trials comparing group antenatal care with conventional antenatal care were included. Cluster-randomised trials were eligible, and one has been included. Cross-over trials were not eligible.

Data collection and analysis

Two review authors independently assessed trials for inclusion and risk of bias and extracted data; all review authors checked data for accuracy.

Main results

We included four studies (2350 women). The overall risk of bias for the included studies was assessed as acceptable in two studies and good in two studies. No statistically significant differences were observed between women who received group antenatal care and those given standard individual antenatal care for the primary outcome of preterm birth (risk ratio (RR) 0.75, 95% confidence interval (CI) 0.57 to 1.00; three trials; N = 1888). The proportion of low-birthweight (less than 2500 g) babies was similar between groups (RR 0.92, 95% CI 0.68 to 1.23; three trials; N = 1935). No group differences were noted for the primary outcomes small-for-gestational age (RR 0.92, 95% CI 0.68 to 1.24; two trials; N = 1473) and perinatal mortality (RR 0.63, 95% CI 0.32 to 1.25; three trials; N = 1943).

Satisfaction was rated marginally higher among women who were allocated to group antenatal care, but this 5 point difference is not clinically meaningful on the scale used (mean difference 4.90, 95% CI 3.10 to 6.70; one study; N = 993). No differences in neonatal intensive care admission, initiation of breastfeeding or spontaneous vaginal birth were observed between groups. Several outcomes related to stress and depression were reported in one trial. No differences between groups were observed for any of these outcomes.

No data were available on the effects of group antenatal care on care provider satisfaction.

We used the GRADE (Grades of Recommendation, Assessment, Development and Evaluation) approach to assess evidence for seven prespecified outcomes; results ranged from low quality (perinatal mortality) to moderate quality (preterm birth, low birthweight, neonatal intensive care unit admission, breastfeeding initiation) to high quality (satisfaction with antenatal care, spontaneous vaginal birth).

Authors' conclusions

Available evidence suggests that group antenatal care is acceptable to women and is associated with no adverse outcomes for them or for their babies. No differences in the rate of preterm birth were reported when women received group antenatal care. This review is limited because of the small numbers of studies and women, and because one study contributed 42% of the women. Most of the analyses are based on a single study. Additional research is required to determine whether group antenatal care is associated with significant benefit in terms of preterm birth or birthweight.

PLAIN LANGUAGE SUMMARY

Group versus conventional antenatal care for pregnant women

Antenatal care is one of the most important healthcare services provided for pregnant women around the world. In most Western countries, health care during pregnancy traditionally involves a schedule of one-to-one visits with a midwife, an obstetrician or a general practitioner (GP) in a hospital or clinic setting. A different way of providing pregnancy care involves use of a group model rather than a one-to-one approach. Group antenatal or pregnancy care has been developed in the USA in a model known as CenteringPregnancy. Care is provided by a midwife or an obstetrician to groups of eight to 12 women of similar gestational age. Groups meet eight to 10 times during pregnancy at the usual scheduled visits, with sessions running for 90 to 120 minutes. All pregnancy care is provided in this group setting by integrating the usual pregnancy health assessment with information, education and peer support.

We undertook a systematic review of trials that compared the effects of group pregnancy care versus conventional individual pregnancy care on psychosocial, physiological, labour and birth outcomes for women and their babies as well as on care provider satisfaction. Four randomised controlled trials (involving 2350 women) were included: two were undertaken in the USA, one in Sweden and one in Iran. We found no differences between women who received group pregnancy care and those given one-to-one care in terms of important pregnancy outcomes such as preterm birth, infant birthweight or death of the baby. Women who attended group pregnancy care were no more likely to initiate breastfeeding than those receiving standard care. In one trial, women who attended group pregnancy care rated their satisfaction as similar to women receiving individual care.

Major differences between trials were noted. One trial targeted young women 14 to 25 years of age in a setting with many African American women who had limited financial resources. The main purpose was to reduce human immunodeficiency virus (HIV) risk behaviour and sexually transmitted infections. Another trial was mainly looking at family readiness in a military setting, and another focused on women's satisfaction and emotional aspects of their care.

This review is limited owing to the small numbers of studies and women, with one study contributing 42% of the women. More research is required to determine whether group pregnancy care is associated with significant benefits.