

> T (+64) 09 9239490 E v.jordan@auckland.ac.nz

# New and updated Cochrane summaries for Midwifery

From the Cochrane Library free for all New Zealanders at: www.cochranelibrary.com

[Click on the title to hyperlink to abstract]

Anti-D administration in pregnancy for preventing Rhesus alloimmunisation

Interventions for treating constipation in pregnancy

Vitamin E supplementation in pregnancy

Measuring the height of the uterus from the symphysis pubis (SFH) in pregnancy for detecting problems with fetal growth

Interventions for nausea and vomiting in early pregnancy

## Anti-D administration in pregnancy for preventing Rhesus alloimmunisation

Posted: 02 Sep 2015 03:00 PM PDT Updated

Authors:

McBain RD, Crowther CA, Middleton P

Women whose blood group is Rh-negative sometimes form Rh-antibodies when carrying a Rh-positive baby, in response to the baby's different red blood cell make-up. This sensitisation is more likely to happen during birth, but occasionally occurs in late pregnancy. These antibodies can cause anaemia, and sometimes death, for a Rh-positive baby in a subsequent pregnancy. Giving the mother anti-D after the first birth is known to reduce this problem. This review assessed two trials with moderate to high risk of bias and found that giving anti-D during pregnancy may help as well, although more research is required to confirm these possible benefits and identify any possible harms.

## Interventions for treating constipation in pregnancy

Posted: 03 Sep 2015 03:00 PM PDT New Authors: Rungsiprakarn P, Laopaiboon M, Sangkomkamhang US, Lumbiganon P, Pratt JJ

What is the issue?



## T (+64) 09 9239490 E v.jordan@auckland.ac.nz

The term 'constipation' is defined as difficulty in passing stool and reduced frequency of bowel movements. It is characterised by discomfort, excessive straining, hard or lumpy stools, a sensation of incomplete evacuation, and infrequent bowel movements. Constipation is a common symptom experienced during pregnancy. This can result from a combination of factors, including changes in hormones during pregnancy affecting the digestive system, reduced physical activity and changes in dietary habits during pregnancy. In addition, as the baby grows it can press on the mother's intestines and cause digestive delays/obstructions.

#### Why is this important?

Constipation during pregnancy is associated with impaired quality of life and distress for pregnant women as well as physical problems including, occasionally, haemorrhoids. There are a range of suggested treatments with drugs, supplements or dietary modifications.

Generally, non-pharmacological interventions (changes in diet, water intake and exercise) are recommended initially, followed by pharmacological interventions if the non-pharmacological interventions fail or are insufficient. Pharmacological interventions include medications from a wide range of drug classes including lubricants, bulk-forming agents, osmotic laxatives, stimulant laxatives, stool softeners, and enemas and suppositories.

This review looked at the benefits of drug and non-drug interventions for constipation in pregnancy and whether they are safe for women and babies.

#### What evidence did we find?

We identified four studies, but only two studies (with a total of 180 women) provided data for analysis. The studies looked at stimulant laxatives compared with bulk-forming laxatives and dietary fibre supplementation versus no intervention. The included studies were judged to be of moderate quality.

We looked at two main comparisons. In the first, we found that stimulant laxatives may be more effective in improving constipation than bulk-forming laxatives (*moderate quality evidence*). However this may also cause more abdominal discomfort (*low quality evidence*) and diarrhoea (*moderate quality evidence*) and we found no difference in women's satisfaction (*moderate quality evidence*). The second comparison, between fibre supplementation and no intervention, found that fibre supplementation may be effective in increasing the frequency of stools (*moderate quality evidence*). Fibre supplementation was associated with improved stool consistency as defined by trialists (hard stool decreased by 11% to 14%, normal stool increased by 5% to 10%, and loose stool increased by 0% to 6%).

There were no studies that looked at others types of interventions like osmotic laxatives, stool softeners, lubricant laxatives and enemas and suppositories.

#### What does this mean?

What little evidence there is, suggests that dietary fibre supplementation may increase the frequency of stools. If choosing between stimulant and bulk-forming laxatives, then stimulant may relieve constipation better but may cause more abdominal discomfort and diarrhoea.

More research in this area is needed.



> T (+64) 09 9239490 E v.jordan@auckland.ac.nz

## Vitamin E supplementation in pregnancy

Posted: 06 Sep 2015 03:00 PM PDT Updated Authors: Rumbold A, Ota E, Hori H, Miyazaki C, Crowther CA

### What is the issue?

Does giving vitamin E supplementation, alone or in combination with other vitamins, given to women during pregnancy improve outcomes for their babies by reducing the incidence of pre-eclampsia and the number of babies born too early? Or does it cause harm?

## Why is this important?

Although vitamin E deficiency is rarely seen in healthy adults, for pregnant women, insufficient dietary vitamin E (found in vegetable oils, nuts, cereals and some leafy green vegetables) may lead to complications such as pre-eclampsia and the baby being born small. In addition, vitamin E deficiency can be made worse by too much iron and so it is important to investigate the optimum amounts for pregnancy.

### What evidence did we find?

This review included 21 trials involving over 21,000 women. Four trials did not contribute data to the analyses. The trials were generally of variable quality. There were just three studies on vitamin E supplementation alone, but none of these studies contributed data. All other studies included vitamin C, and additional supplements or drugs.

The findings indicate that routine supplementation with vitamin E in combination with other supplements during pregnancy did not improve outcomes for babies or women. There was a reduction in the number of placentas coming away early (placental abruption) in women given vitamin E supplements in combination with other agents, which was rated as high-quality evidence. However, it is unclear whether this finding was due to vitamin E or the other agents used in the supplement. This should be explored in further research examining the mechanisms leading to placental abruption.

The review found there may be harms associated with vitamin E supplements in pregnancy, as there was an increased risk of abdominal pain and term prelabour rupture of fetal membranes in women supplemented with vitamin E in combination with other supplements. There was no increase in preterm prelabour rupture of membranes in women supplemented with vitamin E and other agents.

### What does this mean?

The large body of evidence does not support taking vitamin E supplements, alone or in combination, during pregnancy. This is because taking vitamin E in combination with other supplements during pregnancy does not help to prevent problems in pregnancy including stillbirth, baby death, preterm birth, pre-eclampsia or low birthweight babies. In fact, it may increase abdominal pain for women and also increase the number of women having early rupture of membranes at term.



T (+64) 09 9239490

## E v.jordan@auckland.ac.nz Measuring the height of the uterus from the symphysis pubis (SFH) in pregnancy for detecting problems with fetal growth

Posted: 07 Sep 2015 03:00 PM PDT Updated Authors: Robert Peter J, Ho JJ, Valliapan J, Sivasangari S

Monitoring the baby's growth is important during pregnancy. If growth is poor then this should be identified as soon as possible, because delay might result in the baby's death. The simplest way to determine growth is to examine the baby by palpating the mother's by abdomen and estimate the size of her womb compared with a landmark such as the navel (umbilicus). An alternative method is to use a tape measure to take a measurement, known as the symphysial fundal height (SFH) measurement, from the mother's public bone (symphysis publis) to the top of the womb. The measurement is then applied to the gestation by a simple rule of thumb and compared with normal growth.

We wanted to know which of these two methods is more likely to detect poor growth. Ultrasound assessment can also be used to detect growth restriction but this is costly and not always available, and there are concerns about its unnecessary use. We found only one randomised trial (involving 1639 women at 20 weeks' gestation and above) comparing repeated measures of SFH with abdominal palpation. The trial found no difference between the two approaches in detecting poor growth. With such limited evidence, it is still not known whether one method is more effective than the other, and how these methods compare with ultrasound measurement. The main findings from this review were assessed for quality using software called GRADEpro. The overall evidence was of low/very low quality.

## Interventions for nausea and vomiting in early pregnancy

Posted: 07 Sep 2015 03:00 PM PDT Updated Authors: Matthews A, Haas DM, O'Mathúna DP, Dowswell T

Nausea, retching or dry heaving, and vomiting in early pregnancy are very common and can be very distressing for women. Many treatments are available to women with 'morning sickness', including drugs and complementary and alternative therapies. Because of concerns that taking medications may adversely affect the development of the fetus, this review aimed to examine if these treatments have been found to be effective and safe.

This review found a lack of high-quality evidence to back up any advice on which interventions to use. We examined 41 randomised controlled trials that included 5449 women in early pregnancy. These studies examined the effectiveness of many treatments including acupressure to the P6 point on the wrist, acustimulation, acupuncture, ginger, chamomile, vitamin B6, lemon oil, mint oil, and several drugs that are used to reduce nausea or vomiting. Some studies showed a benefit in improving nausea and vomiting symptoms for women, but generally effects were inconsistent and limited. Overall, studies had low risk of bias related to blinding and reporting on all participants in the studies. However some aspects of the studies were reported incompletely in a way that meant how participants were allocated to groups was unclear and not all results were fully and clearly reported. Most studies had different ways of measuring the symptoms of nausea and vomiting and therefore, we could not look at these findings together. Few



T (+64) 09 9239490

E v.jordan@auckland.ac.nz

studies reported maternal and fetal adverse outcomes and there was very little information on the effectiveness of treatments for improving women's quality of life.