



The ACORN study – finding ways of helping with high levels of anxiety in pregnancy

Introducing a new group-based intervention (CALM) for pregnant women

By Heather O'Mahen and Paul Ramchandani

Should we worry about anxiety in pregnancy?

For many women, pregnancy is a positive experience. However, for a significant number of women, pregnancy can intensify existing areas of anxiety and introduce new concerns. Having a baby is a deeply important experience for many people, and when that is combined with low perceived control and the unpredictability associated with pregnancy, birthing and raising a baby, and changes in the couple relationship, many women and men can become unsettled. In up to 8% of pregnant women, these intensifying concerns can lead to levels of anxiety that interfere with the woman's ability to function in her relationships and at work. Women who have had previous miscarriages or negative birth experiences may be especially likely to have intense worries. Women who are isolated or have poor support are also at risk for having more struggles with anxiety. These feelings can have a considerable impact on the woman during pregnancy and can also leave her at an increased risk of postnatal anxiety and depression. If left untreated, both anxiety and depression are conditions which can make it challenging for the mother to provide care for her baby, and can interfere with the formation of a secure emotional bond between mother and infant.

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Although some level of worry during pregnancy and the postnatal period is normal, it is important for health providers working with women to assess whether or not her worries are intensifying and interfering with her ability to get on with her life as she normally would. NICE now recommends that all health providers ask women two questions about anxiety: “In the past two weeks, how often have you been bothered by feeling nervous, anxious, or on edge? Not being able to stop or control worrying?” The key feature of these two questions is to assess how much time women spend feeling anxious and not able to stop the worrying because the more time women spend feeling anxious, the more likely it is that these worries are interfering with their life. If a woman indicates that she is struggling a good deal of the time, then further assessment should be conducted and the health provider should talk to the woman about her options for treatment for her anxiety.

Despite the fact that both depression and anxiety are common during pregnancy and may have adverse consequences for the mother and her baby, most of the research on interventions during this period is only for depression; there is very little research into the best and most acceptable ways of helping women with anxiety. Recent national guidelines in the UK,¹ USA,² Canada,³ and Australia⁴ have stressed the crucial importance of identifying and offering treatment for antenatal anxiety and depression. These guidelines recommend screening for all women as a routine part of antenatal care, along with timely access to appropriate services for assessment and psychological intervention in pregnancy. These recommendations were made despite the lack of robust evidence to guide the direction of treatment for women who have anxiety during pregnancy and the absence of systematic research examining the impact of treating antenatal anxiety on maternal and infant outcomes. This missing link is critical, as the potential opportunity for reducing distress for women in pregnancy is large, as is the potential for preventing later problems both for the woman herself and her developing child. Further, some interventions for trauma-related responses have been found to be harmful, so it is important to offer appropriate interventions that effectively reduce women’s anxiety.

Developing a new intervention

There are some psychological interventions that are known to help with anxiety, such as cognitive behavioural therapy; however, none have been extensively tested for women in pregnancy – a time when the worries are often different, and different approaches to treatment may be needed. A team of us, including women with lived experience of anxiety during pregnancy, experienced psychologists, midwives, psychiatrists, and other researchers set out to adapt and develop a new intervention for women experiencing high levels of anxiety during pregnancy. Building on work from Australia undertaken by Jeanette Milgrom, Jennifer Ericksen and colleagues (Towards Parenthood⁵), we developed a brief group intervention for anxiety that takes place during the second trimester of pregnancy. The original Towards Parenthood intervention was an individual, 10-session, guided self-help programme. Clients received a workbook and were supported in telephone calls by trained mental health professionals. The content of the intervention focussed on thinking about and planning for the baby, with a particular focus on managing thoughts, emotions and communication with important others.

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The new intervention that we have developed (CALM) is briefer, and is tailored specifically for use with pregnant women experiencing antenatal anxiety. It includes content that addresses pregnant women's concerns (i.e., fear of miscarriage and birth, worries about becoming a parent). It is delivered in a group format jointly by a midwife and psychological therapist. Embedding the intervention in routine antenatal care in a brief midwife/psychologist-led group format means that it has the potential to be a cost-effective mode of delivery and one that is robust to changing healthcare environments, requiring less time and input from midwives than an individual psychological approach, and being widely available to women experiencing difficulties with anxiety. The design of the intervention means that women suffering from anxiety who are already attending, or are interested in attending, antenatal courses could participate in CALM as a more targeted set of antenatal classes. Integrating mental health classes within the structure of overall antenatal education potentially de-stigmatises the treatment and also provides an opportunity to focus holistically not just on baby, but also on the mother's mental health and the parents' relationship – features our service users strongly advocated for. Further, the group setting allows both mothers and their partners or important others to share and normalise their experiences. As such, CALM has the potential to improve outcomes for a wide range of pregnant women and their infants, thereby reducing the overall population burden of anxiety during pregnancy. With funding from the National Institute of Health Research we have been able to develop this programme and test it in a small trial to see if it is effective in reducing symptoms of anxiety.

What does the intervention involve?

The programme involves attending three group sessions. The sessions are held at two to three week intervals and each session lasts for about 1.5 hours. Wherever possible we try to include partners or a close supporter of the mother and we run some of the sessions separately for mothers and their partners/supporters. However we offer the programme to all who are eligible, and so are very happy for women to come on their own if they prefer. During these sessions women and their partners/supporters (where relevant) are given information about stress and anxiety during pregnancy, and learn a variety of techniques and strategies to help with these feelings. These include strategies from cognitive behaviour therapy as well as some mindfulness and compassion approaches. For example, the course applies skills in both problem solving and tolerating uncertainty to pregnancy fears (including miscarriage), and incorporates reflective learning strategies for partners/supporters to assist women with problem solving.

What stage is the research at now?

We have run seven groups to date in London and Exeter, testing the CALM intervention against women's treatment as it usually occurs (e.g., this may involve mental health screening from a midwife and follow-up from a GP or primary care mental health care provider) to see if the treatment helps to reduce women's anxiety. A detailed evaluation of the programme is currently underway (known as the ACORN study). All participants have completed standardised questionnaires about anxiety and depression, and detailed interviews have been conducted with many women and their partners. Whilst we are still in the process of analysing all the results, the initial findings are

promising, with high rates of women agreeing to take part and many women finding that it addresses their concerns and helps to reduce their levels of anxiety. One of the attendees said, 'I think it's made a big difference to me and I feel... without it... I would feel still very anxious and quite alone.' Another said, 'All my physical needs have been met really, really well by the general NHS programme. I was really pleased to be involved in the study, for the chance to be able to talk about more of the emotional things which I hadn't realised isn't really touched on at all and there are really big changes.'

What next?

We aim to test the intervention on a larger scale, and also begin to implement it in a small number of new services areas – there is still much to learn, and whilst we are happy that we have an intervention that does seem to be helpful for women with anxiety in pregnancy, it is important to evaluate this carefully and thoroughly, including measuring any effects on longer term outcomes such as mother-baby attachment. If it is found to be effective, it offers the potential to help a wide range of women, as it is a group intervention, easily deliverable by professionals once they have received appropriate training.

This article describes research funded by the National Institute for Health Research (NIHR) under its Research for Patient Benefit (RfPB) Programme (Grant Reference Number PB-PG-1112-29054). The views expressed are those of the author(s) and not necessarily those of the NHS, the NIHR or the Department of Health.

Further details of the ACORN study are available here: <http://trialsjournal.biomedcentral.com/articles/10.1186/s13063-016-1274-8>

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