Supporting Women With Mild to Moderate Anxiety in Pregnancy: a Feasibility Study of a Midwife Facilitated Intervention

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Abstract

Aim: The aim of the study was to determine the acceptability and feasibility of an intervention to support women with mild to moderate anxiety in pregnancy.

Design: The intervention development and feasibility testing followed the MRC guidelines for complex interventions. A feasibility study was conducted between April - May 2016.

Methods: Qualitative and quantitative data were collected to assess the acceptability and feasibility of the intervention. The intervention was delivered in three components: pre-group individual meeting with the midwife; group sessions; guided self-help resources. The intervention was facilitated by midwives and co-facilitated by midwifery support workers

Results: Eight women with self-reported symptoms of mild to moderate anxiety participated in the study. Women reported an improvement in anxiety symptoms and felt they had benefitted from participation. Accessing social support from other women in similar circumstances had helped women to feel less isolated and facilitated open and honest discussions. Women valued the involvement of the midwife facilitator to support their wellbeing and provide specific advice about their pregnancies.

Conclusions: The intervention design appeared to be acceptable and beneficial for this group of women. This study highlights the potential for midwives to facilitate supportive interventions to enhance the current provision of emotional support for women with anxiety symptoms in pregnancy and address the current gap in services. The intervention is potentially feasible for introduction into current clinical practice with minimal additional resources.

Background

Each year in the UK approximately 750,000 women use midwifery services, and around 14% of those women will experience symptoms of anxiety during pregnancy (Heron et al. 2004, National Institute for Health and Care Excellence, NICE 2014). Pregnant women may be at increased risk of developing anxiety symptoms if they have had previous mental illness, a family history of mental illness, suffered emotional, physical or sexual abuse, use drugs, alcohol or smoke before or during pregnancy, have poor partner or social support, are at a young age, are unemployed, have an unwanted pregnancy, have obstetric or health complications or experienced previous pregnancy loss (Biaggi et al. 2016). Symptoms of anxiety can range from mild to severe and are often comorbid with symptoms of depression (Verreault et al. 2015). Although mild anxiety in pregnancy may be a normal adaptive process, symptoms become problematic when they consume a large proportion of a woman's time and significantly interfere with everyday life (Guardino et al. 2014, Wenzel 2011). Anxiety symptoms in pregnancy are similar to other common anxiety disorders such as feeling restless or on edge, fatigue, difficulty concentrating, irritability, muscle tension and sleep disturbance (American Psychiatric Association 2013). However, specific concerns about pregnancy may present as the predominant feature (Vythilingum 2009, Bayrampour et al. 2016). Pregnancy-related anxiety has been identified as a distinct concept from general anxiety disorders

(Bayrampour et al 2016). Women may experience fear related to the health of the baby, her appearance and health during pregnancy or fear related to labour and birth (Lobel et al. 2008, Robertson Blackmore 2016). Women may also worry about social, financial and parenting issues, lack of control over decision making and their experiences with the health care systems. Severe and prolonged anxiety has been associated with pre-term birth, low birth-weight, and physical, intellectual and behavioural problems in developing children (Hansel et al. 2000, Rich-Edwards & Grizzard 2005, O'Connor et al. 2002; Ramchandani et al. 2006, Orr et al.2007, O'Donnell et al. 2014). Anxiety during pregnancy is a significant predictor for developing postnatal depression and post-traumatic stress disorder (Reece & Harkless 1998, Czarnocka & Slade 2000, Iles et al. 2011). Anxiety disorders in pregnancy have economic impacts with aggregated values of lifetime costs per woman with perinatal anxiety reported as £34. 811 for the mother and child (including public sector costs, productivity losses, health related quality of life, unpaid care, and victim cost of crime) (Bauer et la. 2016).

Perinatal mental health is a priority area identified in the UK NHS long term plan (NHS 2019) which aims to provide greater access to specialist perinatal mental healthcare. Psychological interventions developed specifically for pregnant women with mental health concerns have demonstrated promising results but have not been rigorously evaluated in large studies (Lavender 2016). Recent systematic reviews found insufficient evidence to draw overall conclusions regarding the benefit of interventions for pregnant women with anxiety (Evans et al. 2017, 2019). For this study, the intervention development followed the MRC framework for complex interventions, theoretical and modelling phases (Craig et al. 2008). The design responded to the synthesised review findings which identified three components which were likely to increase the effectiveness of the intervention (*Evans et al. BMC Pregnancy and Childbirth in submission July 2020*). Social support, relational continuity, psychological and relaxation response theory was used to develop a novel intervention, comprising group discussions, one-to-one support and directed self-help materials with a choice of cognitive or mind-body resources.

Methods

Aims

The aim of the study was to determine the acceptability and feasibility of the new intervention for women with symptoms of mild to moderate anxiety in pregnancy. The components of acceptability and feasibility which were evaluated included: rates of eligibility, uptake and completion of the intervention, women's views on the acceptability of the intervention and experience of participating in the study, the feasibility introducing the intervention within existing maternity care systems and the potential for conducting a future definitive trial.

Design

The intervention development and feasibility testing followed the MRC guidelines for complex interventions (Craig et al. 2008) (*Evans et al. BMC Pregnancy and Childbirth in submission July 2020*). The intervention was conducted as a feasibility study did not have a control group and was not powered

for formal hypothesis testing (National Institute for Health Research, NIHR 2017). All permissions to undertake the study were received from the Health Research Authority and the Research Ethics Committee in March 2016 (16/EM/0041).

Intervention design

The intervention was delivered in three components (Table 1). The midwife facilitators and Maternity Support Worker (MSW) co-facilitators who expressed an interest were selected from the local NHS trust's existing workforce and attended a three-day workshop developed and delivered by mental health professionals and educators.

Table 1
Intervention design

Component 1: One to one, pre-group meeting	Component 2: Group sessions	Component 3: Guided self-help resources
A 10-minute face-to face individual meeting between the midwife facilitator and the woman. Purpose of this session was to 1. to meet the midwife before the first group session; 2. welcome the woman into the intervention; and 3. help her feel more comfortable attending the group	Four sessions over an eight-week period (every fortnight) held in community centres. Facilitated by midwife and MSW. Sessions lasted 90 minutes (early evening). Purposes of the sessions were 1. access group support; 2. support and encourage women accessing self-help resources; and 3. to discuss any concerns individually with the midwife following the group sessions. At group 1, midwife facilitators discussed ground rules (respecting each other's point of view and to keep confidential any sensitive information). In groups 2–4, facilitators agreed a discussion agenda with the women and discussed their progress with the self-help resources.	Five self-help resources were provided, and women had a choice which resources to access. Women were encouraged to access the self-help resources between groups and to discuss their progress with the group.

Setting/Participants

Participants were recruited from one of two antenatal clinics held in community healthcare locations where midwifery care was provided by the local NHS Hospitals Trust. Women attending for a routine antenatal midwife appointment at approximately 16–25 weeks of pregnancy were included in the study. Women were eligible who: were nulliparous pregnant women aged 18 years or older; self-reported symptoms of mild to moderate anxiety (score 3–14 on the GAD-7 scale, Spitzer et al. 2006); able to read and write and speak the English language and provide written informed consent. Women were excluded if they were receiving treatment for a severe and enduring mental health condition; or women who met the criteria for complex social factors (NICE 2010) as these groups of women received specialist care in the study setting. The sample size of the feasibility study was not designed to have the power to generate

statistically meaningful data (NIHR 2017) and a pragmatic decision was made to recruit 10–20 participants.

The initial approach to each participant was from the woman's community midwife. Women who were interested in the study with a Participant Information sheet and asked to complete the GAD-2 scale (Spitzer et al. 2006). If a woman scored three or more on the GAD-2 scale, the midwife asked the woman's permission to collect contact information to be passed to the researcher. The researcher provided each woman with the opportunity to ask any questions about the study and arranged to meet with the woman to gain informed written consent.

Data collection

Participants were asked to complete pre and post intervention self-report measures including:

- The 7-item Generalised Anxiety Disorder scale (GAD-7, Spitzer et al. 2006)
- The State-Trait Anxiety Inventory (STAI, Spielberger et al. 1983)
- The Pregnancy Related Anxiety Questionnaire – Revised (PRAQ-R, Huizink et al. 2004)
- The Edinburgh Postnatal Depression Scale (EPDS, Cox et al. 1987)
- The 12-item Short-Form Health Survey (SF-12, Ware et al. 1996)

At post-intervention, all participants were interviewed about their experiences of the intervention. Interviews were audio recorded and transcribed verbatim.

Data analysis

Descriptive statistics were used to describe pre/post intervention quantitative data from self-report measures using measures of mean and variance including confidence intervals (95% CI) and standard deviation (SD). Qualitative interviews were transcribed prior to conducting template analysis (King 2004) An *a priori* coding template was developed which was informed by themes identified in the literature review (Evans et al. 2017, 2019). Transcripts were then read through and new themes which arose were incorporated into the initial template. The initial template was then applied to the whole data set and modified in the light of careful consideration of each transcript (King 2004). An audit trail displaying successive versions of the template in its development and the interpretations of the data were produced. Once a final version was defined, the template served as the basis for the interpretation of the data set. The final template was confirmed by the researcher and academic supervisors.

Validity and Rigour

Established research frameworks for developing complex interventions were followed alongside quality assessment tools relevant for the different methodological components (Craig et al. 2006, DesJarlais & Lyles 2004, Moore et al. 2015, Tong et al. 2007). Study outcome measures were selected which reflected clinical practice recommendations (NICE 2014); have been more extensively evaluated or used during

pregnancy (Evans et al. 2015); and women have said were relevant and acceptable to them (Evans et al. 2016).

Ethical considerations

For the participant, screening tools can be seen to offer a definitive diagnosis and they may not be aware of the possibility for a false positive result (Jansen & de Bont 2010, Palmer et al. 2011). The researcher informed the woman that self-report screening instruments do not provide a diagnosis but highlight when women may benefit from further discussion about their psychological health with their GP. For some women, sharing experiences and feelings may be beneficial. However, discussing anxiety may be sensitive, embarrassing or upsetting for some women. The midwife facilitator was available following the groups to discuss any individual concerns.

Results

From the 12th April – 26th May 2016, 54 nulliparous women between 16–25 weeks of pregnancy who met the initial eligibility criteria in the two locations were approached about their interest in participating. Over the study period, 76% of women (n = 41/54) were initially interested in the study. Ten women (19%), who scored 3–14 on the GAD-7 scale were eligible to participate. One woman did not reply to phone messages and one woman was unable to participate due to work commitments. The remaining eight women (15%) participated in the study. A participant flow diagram is detailed in Fig. 1. Participant baseline demographic characteristics are presented in Table 2.

Table 2
participant demographic characteristics

Mean age in years (SD)	**31 (6.2)**
Mean gestational age in weeks at enrolment (SD)	17 (2.1)
Mean gestational age in weeks at intervention start (SD)	19 (1.9)
Mean gestational age in weeks at intervention end (SD)	27 (1.9)
Number of women employed (%)	7 (87.5%)
Number of women unemployed (%)	1 (12.5%)
Ethnicity	8 (100%)
White British (%)	
Household composition (%)	7 (87.5%)
Number of women living with partner	1 (12.5%)
Number of women living with others	

Self-report anxiety, depression and quality of life questionnaires

Pre and post self-report measures are presented in Table 3 and 4.

Table 3
Questionnaire scores: numbers and % of women who reported scores above thresholds for anxiety and/or depression

GAD-7 score of 10 or more: number of women (%)	
Baseline	6 (75%)
Post-intervention	1 (12%)
*Lower GAD-7 scores indicate fewer reported symptoms of GAD	
STAI-S score of 40 or more: number of women (%)	
Baseline	5 (63%)
Post-intervention	4 (50%)
*Lower scores indicate fewer reported symptoms of anxiety	
EPDS score of 10 or more: number of women (%)	
Baseline	7 (88%)
Post-intervention	4 (50%)
*Lower scores indicate fewer reported anxiety/depression symptoms.	

Table 4
Questionnaire scores at baseline and post-intervention

Self-report measure	**Baseline mean score (SD) [95% CI] n = 8**	**Post-Intervention mean score (SD) [95% CI] n = 8**
EPDS	**12.5** (2.88) [10.51–14.49]	**10.5** (3.85) [7.83–13.17]
GAD-7	**10.37** (3.42) [8.01–12.75]	**6.75** (3.45) [4.36–9.14]
PRAQ-R (fear of giving birth)	**7.63** (2.33) [6.02–9.24]	**8.13** (1.13) [7.35–8.91]
PRAQ-R (worries about bearing a physically / mentally handicapped child)	**10.5** (3.96) [7.75–13.25]	**9.63** (3.66) [7.09–12.17]
PRAQ -R (concern about own appearance)	**6.63** (2.45) [4.94–8.32]	**5.63** (2.0) [4.25–7.01]
STAI-S	**44.87** (9.40) [38.36–51.4]	**38.75** (5.72) [34.78–42.72]
STAI-T	**55.75** (10.92) [48.18–63.32]	**47.75** (9.65) [41.06–54.44]
SF-12 (physical component PCS)	**49.51** (10.48) [49.9–56.0]	**42.03** (13.2) [37.14–48.97]
SF-12 (mental component MCS)	**31.84** (7.84) [27.44–36.67]	**39.58** (8.59) [37.38–43.45]
* For the EDPS, GAD-7, PRAQ-R and STAI, lower scores indicate fewer reported symptoms ** For the SF-12, higher scores indicate better reported health status		

Self-report measure	**Baseline mean score (SD) [95% CI] n = 8**	**Post-Intervention mean score (SD) [95% CI] n = 8**

EPDS: Edinburgh Postnatal Depression Scale; **GAD-7**: Generalized Anxiety Disorder 7-item scale; **PRAQ-R**: Pregnancy Related Anxiety Questionnaire (Revised); **STAI**: State Trait Anxiety Inventory; **SF-12**: 12-Item Short Form Health Survey.

Participant interviews

Data were ordered into general theme headings which encompass more descriptive sub-theme headings (Table 5). Participant quotations are coded, for example: P1-P10 (Participant ID number). Participant quotations are presented to support the findings from the analysis.

Table 5
Participant interview data themes and sub-themes

Introducing the study	**Women wanted the intervention to be offered to them by their midwife.**
	Women thought the intervention may be of benefit but had some concerns about participating.
	Women felt the intervention should have been available earlier in pregnancy.
	Meeting the midwife before the groups helped the women feel more confident about attending.
Group discussions	Women liked the fact that sessions were held in community centres.
	Attending was easier for women who had more flexible work patterns.
	Sharing experiences and receiving support from other women with similar feelings to them was helpful and reassuring.
	Some women found it difficult to join discussions and had anxiety about speaking in a group.
	Women preferred informal discussions to structured sessions.
	Groups took time to establish in order for women to feel confident to speak honestly and openly.
	Women said there should have been more than four groups and sessions needed to be longer.
	Most women preferred participating in smaller groups.
	Most women liked that the groups consisted of women who were all nulliparous and experiencing symptoms of anxiety.
	Women compared their own feelings and experiences with those of other women in the group.
Self-help materials	Women preferred self-help anxiety materials which were specific to pregnancy to more general anxiety materials.
Individual time with facilitators	Most women said individual support from facilitators was easy to access.
	Some women preferred to speak to facilitators before the start of the group rather than at the end.
Access to support	Women said there was little existing support for women with anxiety in pregnancy.
	Women said that being busy at work helped them cope with their anxiety.
Overall thoughts on participating in the study	It was important to the women that the intervention was facilitated by a midwife
	Some women were very comfortable talking about their anxiety with HCPs, but some women found it more difficult to talk about their anxiety and were worried about the potential consequences of disclosing their symptoms.
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Introducing the study	**Women wanted the intervention to be offered to them by their midwife.**
	Women thought the intervention may be of benefit but had some concerns about participating.
	Women felt the intervention should have been available earlier in pregnancy.
	Meeting the midwife before the groups helped the women feel more confident about attending.
	Women wanted to meet with other pregnant women to help them feel less isolated.
	Most women said participating in the study was beneficial and enjoyable.
	Most women said they would recommend the intervention to other women.
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Introducing the study

Most of the women said they would not have self-referred to participate in the intervention. They were pleased that the midwife had identified their need for support without them having to ask for help. Women initially thought the intervention may have been of benefit to them but had some concerns about participating.

"... some people might not recognise ... they might not have anxiety issues straight away, or might not feel comfortable to go off their own back and go to a session ... they might need someone to say actually I think you could really benefit from this ..." P10

Some women were initially concerned that listening to other women speak about their anxieties could have made them feel worse; that they would absorb other women's negative thoughts. Other women were worried about attending groups because they did not know what to expect.

"... the only thing I had in my mind was making sure that I didn't get caught up in horror stories ... when you're quite anxious you can start to soak up other people's anxieties ..." P6

"Yes, I was nervous ... I didn't know what would happen in the sessions, what would be asked or if I would find it hard" P7

Most women felt the intervention should be available earlier in pregnancy. From having their pregnancies confirmed to first ultrasound scan had felt like a long time and knowing that the intervention was available to access at a later stage would have been helpful to them during the first trimester. One woman found the timing of the intervention ideal as during the second trimester she had less contact with her community midwife and felt overwhelmed by the amount of pregnancy information displayed on digital media sites.

"... having it confirmed that you're pregnant to you seeing the midwife, there's a bit of a gap ... your first few worries are sort of great ... even if you can't go to it straight away, just knowing that there are services

out there would help" P2

Women who attended the initial meeting with the midwife found it useful to get to know the midwife, familiarise themselves with the location and discuss any initial concerns. Following the meeting, women felt more confident to attend the group.

Group sessions

Group sessions started with facilitators asking a general question about how the women had felt over the past two weeks. Informal discussions then followed with the women leading the discussions relating to their feelings, concerns, experiences and progress with their pregnancies. The time of the sessions in the early evening was acceptable for women who had more flexibility with their work, but some women found it difficult to get time off work to attend. There was support for the sessions being held in community settings; the location felt private and peaceful and did not feel too clinical. Most women felt they benefitted from sharing experiences and receiving support from other women with similar feelings to them.

"... to know you've connected with other people who think the same as you ... it makes it easier to build those relationships ... something that you might fear that someone else is going through and then you can actually rationalise and go, it's not that bad ... it's OK" P4

"... I find that kind of mutual support really useful when people are able to ask for her help and people are able to give it" P6

Most women said knowing that other women had the same thoughts and feelings provided reassurance that they were not 'crazy' (P1), 'weird' (P4) or 'abnormal' (P10) and helped the women feel less isolated.

"... I realised going there that I'm not silly ... things I was thinking are quite normal and a lot of people think them as well" P10.

Groups took time to establish in order for women to feel confident to speak honestly and openly. Initially, some women did not want to talk about things that they considered may cause distress or worry to others. In the later groups, women felt more comfortable and were able to ask questions of each other and share their feeling more openly.

"... it takes a while to be honest about such sort of personal things ... the group got to a stage where we were asking more questions of each other, not in a sort of an overly challenging way but just to kind of elicit a little bit more discussion to help people say what they wanted to say ... that has been the most valuable thing" P6

"... [women] that had held back from being true and honest and the beginning ... everyone was only saying what they felt that they could say to each other being a little bit polite but then towards the end it was just like ... being completely honest and some people were getting a bit upset sometimes or felt a bit more emotional and that felt a bit more real ..." P10

In the later groups, women said they had just started to feel confident to participate and wanted the groups to continue, they had more questions and anxieties as they were approaching the birth of their baby. Two women indicated that later groups may not need to be as frequent or structured.

"... everybody sort of ended the sessions saying we've really got to stay in touch, we really need to keep going, and I think that speaks volumes about how valuable it was becoming" P6

Most women said that the groups needed to be longer. By the time everyone had had an opportunity to speak the session time was almost over. Two women considered that the first group could be shorter, but more time was needed in the later groups when women felt more confident to speak, share experiences and seek the support of the other women. Women liked the fact that the groups consisted of women who were all nulliparous and experiencing symptoms of anxiety.

"... it was beneficial just because we're all in the same boat really ... I think if you'd had second or third time mums there giving their opinion ... I think they'd have lots of answers to give when I'm not sure if you're necessarily looking for an answer ..." P5

Self-help materials

Women preferred self-help anxiety materials which were specific to pregnancy. The workbook by Harring et al. (2013) preferred by most of the women as it was specific to pregnancy and they liked the examples and case studies presented.

Midwife facilitators

Most women said they felt the option to speak individually with the midwife facilitator was available to them if they needed it and thought this was beneficial. One woman had chosen to speak to the facilitators before the session to check if certain topics were appropriate to introduce in the session. All of the women though it was important for the sessions to be facilitated by a midwife. They valued the midwives' and MSWs' knowledge and experience and were able to ask questions and seek advice about minor symptoms of pregnancy and about birth. Women felt that they could trust the midwives' advice and felt safe with them.

"... it gave you a feeling of security that you were speaking to somebody who'd had experienced so much ... if there was an alternative if it was perhaps somebody who was a psychologist or something like that I don't think it would have anywhere near the same effect ... there were some practical questions that popped up as well along the way ... I'd say it's essential to have midwives there ..." P6

Access to support for anxiety in pregnancy

Women reported little existing support for women with anxiety in pregnancy. One woman had actively looked for help but could not find any support related to pregnancy. One woman did not want to overburden her community midwife and was pleased this 'gap' (P4) in services had been identified. Some women were very comfortable talking about their anxiety with HCPs, but some women found it more difficult and were worried about the consequences of disclosing their symptoms. Two women had concerns that disclosing their symptoms of anxiety may lead to judgements from HCPs about their ability to care for their baby.

“I didn’t want, obviously what I said to affect anything with my future child or anything like that ... I feel like I’m quite an open person and I didn’t want to say the wrong thing ... say if I was just having one off day and something bad happened ... and then it was reported to social services or something so ... that was a worry, not that I’d do anything bad ...” P1

Participating in the intervention

Most women said participating in the intervention was beneficial and enjoyable and would recommend the intervention to other women. Following the sessions some of the women said that although they still felt anxious, they were coping better with their anxiety.

“I think the benefit that we had the most was from listening to each other ... I do feel very fortunate to have been a part of the groups ... I have really enjoyed the sessions, I looked forward to going” P6

Discussion

This is the first study to design and evaluate the feasibility and acceptability of an intervention for pregnant women with mild to moderate anxiety which is facilitated by midwives. Qualitative methods used alongside quantitative methods monitor the acceptability and feasibility of complex interventions prior to definitive testing to understand the mechanisms which bring about change (Craig et al. 2006, Lewin et al. 2009). The qualitative data in this study enabled a deeper understanding of how the intervention functioned, which was then compared to findings from existing studies and to the underlying theory.

Informing the design of a definitive trial

Women’s feedback on the intervention delivery highlighted of the role of the midwife in helping women develop support mechanisms; the changing support needs of the women as they progress through the intervention and identifying how groups may progress to become self-supporting. The feasibility study evaluated which components performed well and where modifications were required prior to progressing to a definitive trial.

The recruitment process involved community midwives introducing the study to potentially eligible women and conducting eligibility screening. From the 41 of 54 eligible women who expressed an interested in the study, 19% (10/41) scored 3–14 on the GAD-7 scale. Other studies have reported the prevalence of anxiety disorders from 12–16% using various measurement questionnaires and diagnostic interviews (Fairbrother et al. 2016, Heron et al. 2004, Rubertsson et al. 2014).

However, this study and previous research has identified limitations to applying psychological assessment criteria. Women may not fully acknowledge their level of anxiety, avoid disclosing the symptoms as a way of coping and have concerns about the consequences of disclosure (Côté-Arsenault & Donato 2011, Darwin et al. 2013). The stigma of mental health concerns, lack of trust about the nature of screening, concerns about confidentiality and reluctance to accept a mental health diagnosis have been reported as barriers to participation in mental health research (Woodall et al. 2010). Individuals can minimise their responses to assessment questionnaires to avoid a mental illness diagnosis (Gerald &

George 2010). In pregnancy and the postnatal period, women worry about the consequences of disclosing anxiety or depression symptoms which they fear could result in being referred to children's social care services due to HCPs child protection concerns (Russell et al. 2013). Two of the women in the study revealed similar concerns about providing honest answers to the self-report anxiety questionnaires. Providing information and having verbal discussions early in the recruitment process may address concerns about psychological screening, fear of stigma and increase the likelihood of participation (Brintnall-Karabelas et al. 2012, NICE 2014).

Minority ethnic groups are often under-represented in health research, which could limit the generalisability of research findings (Sheikh et al. 2009). Cultural barriers to research participation can have an impact on ethnic minority groups due to the stigma associated with mental health (Gary 2005). Future studies should consider the cultural appropriateness of the intervention and develop appropriate recruitment strategies. Service users, local healthcare and community groups need to be involved in designing the protocol and materials for cultural relevance and in promoting the study in ethnically different communities (Craig et al. 2006, Sheikh et al. 2009).

Peer support for women with anxiety in pregnancy

The theoretical base for peer support for women with anxiety in pregnancy was explored. Women reported the main benefit was achieved through sharing feelings and experiences with other women with anxiety. Some initial concerns which emerged for this particular group of pregnant women included fears about upsetting others through sharing stories and an initial lack of confidence to join in discussions. Individuals must feel able to disclose their personal feelings and circumstances in order to connect with others in the group and benefit from group support (Helgeson & Gottlieb 2000). Previous studies have reported that during the first few sessions of group interventions, women felt uncertain about why they had been selected to participate and feared judgement or disapproval from other group members (Breustedt & Puckering 2013, Woolhouse et al. 2014). This was evident in the women's responses about the earlier groups where women reported they found it difficult to understand other women's concerns if they were different to their own. The findings supported a longitudinal intervention as women's initial concerns were overcome with time as they progressed with the groups. Individuals develop bonds with other group members based on providing and receiving experiential knowledge of experiences and health conditions, enabling individuals to feel understood, accepted and validated in their feelings (Repper & Carter 2011). Women with anxiety symptoms in pregnancy have been reported to welcome the opportunity talk to other women who were going through similar experiences (Evans et al. 2016). Most of the women in the study reported that sharing experiences with other women provided reassurance that they were not abnormal for feeling the way they did, as a result they reported feeling less isolated in their experiences. Feelings of isolation and failure are reported in different types of supportive interventions for pregnant and postnatal women (Dennis 2010). Women with symptoms of anxiety and depression question why their experience is different from others and feel as if they have failed to live up to the idealised societal depiction of a perfect pregnancy or a good mother (Evans et al. 2016, Highet et al. 2014, Jones et al. 2014, Rowe & Fisher 2015, Staneva et al. 2015). Peer support mechanisms can serve to challenge these idealised depictions and help women by identifying that not being perfect is acceptable.

This realisation “overcomes isolation, mediates guilt and seemingly facilitates recovery, through the realisation that the experience of being a mother is different for all women” (Jones et al. 2014, page 469).

The role of the midwife

Policy and research recommendations highlighted midwives important role in identifying women with anxiety in pregnancy, supporting women’s emotional wellbeing and signposting to supportive services (Glover 2014, Knight et al. 2015, Maternal Mental Health Alliance 2014, NICE 2014, Royal College of Midwives 2015). Midwives are restricted in their current role by a lack of appropriate training and support, time constraints due to busy services, a focus on physical wellbeing and a lack of awareness of supportive services to signpost women (Knight et al. 2015, McGlone et al. 2016, Russell et al. 2013). The study strived to develop an intervention which could be delivered within midwives’ scope of practice, with minimal additional resources and which could be integrated into existing community midwifery services. This is the first study which has considered the role of MSWs in co-facilitating an intervention for women with anxiety and developed multidisciplinary facilitator training. The women in the study overwhelmingly supported having a midwife intervention facilitator, women felt they benefitted from receiving professional guidance about their pregnancy in addition to support with their anxiety symptoms.

The interchangeable role of help-provider / help-seeker which underpins social support theory aims to empower individuals to move forward from being passive receivers of care (Finfgeld-Connett 2005, Brown & Lucksted 2010). It could be argued that having a midwife as the group facilitator could counteract this mechanism. Repper & Carter (2011, page 395) state “reciprocity is integral to the process of peer–to-peer support as distinct from expert worker support”, based on experience rather than professional expertise to develop equal reciprocal relationships. The role of the professional in peer groups should not interfere with the potential benefits derived when group members help each other (Brown & Lucksted 2010). Many self-help groups include a degree of professional involvement which can be effective as long as professionals do not dominate the functioning, goals, and direction of the group (Solomon 2004). In maternity care, the role of the midwife in breastfeeding support groups has been reported to “normalise or counteract extreme views and help women to distinguish between fact, anecdote and myth” (Hoddinott et al. 2006, page 143). This resonates with the feedback from the women in the groups who trusted the midwives’ experience and knowledge of pregnancy and birth.

Limitations

The original proposal set out to recruit two groups of women in from two community locations. Although this was not achieved, potential recruitment challenges for subsequent studies were identified. A single group was conducted which included women from both locations. This limited the evaluation of the acceptability of the intervention, however, the decision to include women from both locations maximised the potential to access a diverse a range of views as possible within the time constraints. The anxiety measures were selected in response to clinical recommendations and the current psychometric evidence. However, many of the measures require further psychometric evaluation for use with pregnant women. Future studies will need to consider any emerging research demonstrating psychometric performance to ensure the most appropriate and robust anxiety measures are selected.

There are key aspects of the study where the role of the midwife researcher had the potential to introduce bias in the conduct of the study (Kacen & Chaitin 2006). The researcher's clinical experience may have improved the richness of the data, enabling a greater depth of understanding of the issues encountered by the women. However, the study validity can be threatened when researchers are over involved in the subject under study, making incorrect assumptions and misinterpretation of the data (Jootun et al. 2009). To address this concern, reflexivity was used throughout the qualitative data collection and analysis (Berger 2015). Data analysis was undertaken by a single researcher, although the development of the analytic template was discussed at key stages and the final template was confirmed by the researcher and academic supervisors. Reflexive journals, audit trails and feedback from advisory group consultations were used to consider the tension between involvement and detachment of the researcher and explore alternative interpretations of the data.

Conclusions

The intervention design appeared to be acceptable and beneficial for this group of women, midwives and MSW facilitators. The components identified as requiring revision or further development mainly surrounded the study processes (recruitment strategies, number of groups, flexibility in the provision of individual support). The supportive mechanisms which underpinned the intervention performed well in this small study when evaluated against the study objectives.

Although the effectiveness of the intervention has not yet been evaluated, the findings are useful for maternity care professionals interested in developing ways to improve midwives' discussion about mental health. Midwives should acknowledge that for some women it helped that midwives opened discussions and recommended supportive services. To maximise the potential benefits from anxiety screening, midwives need to communicate the purpose of mental health questionnaires and develop skills in their administration. Further research is required to evaluate the effectiveness of interventions to improve symptoms of mild to moderate anxiety in pregnancy. This study highlights the potential for midwives to facilitate supportive interventions to enhance the current provision of emotional support for women with anxiety symptoms in pregnancy and address the current gap in services. The intervention is potentially feasible for introduction into clinical practice with minimal additional resources. The intervention was acceptable, considered beneficial and did not cause harm to the women who participated.

Abbreviations

EPDS Edinburgh Postnatal Depression Scale

GAD-7 7-item Generalised Anxiety Disorder scale

HCP Healthcare Professional

MRC Medical Research Council

MSW Midwifery Support Worker

NICE National Institute for Clinical Excellence

NIHR National Institute for Health and Care Excellence

NHS National Health Service

PRAQ-R Pregnancy Related Anxiety Questionnaire – Revised

SD Standard Deviation

SF-12 12-item Short-Form Health Survey

STAI State-Trait Anxiety Inventory

Declarations

Ethics approval and consent to participate: All permissions to undertake the study were received from the Health Research Authority and the Research Ethics Committee in March 2016 (16/EM/0041). Full informed consent was gained before participants entered the study.

Consent for publication: Not applicable

Availability of data and materials: The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request

Competing interests: The authors declare that they have no competing interests.

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Authors' contributions: KE prepared the manuscript as part of Doctoral study, supervision throughout was completed by HS and JM. All authors read and approved the final manuscript.

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Figures

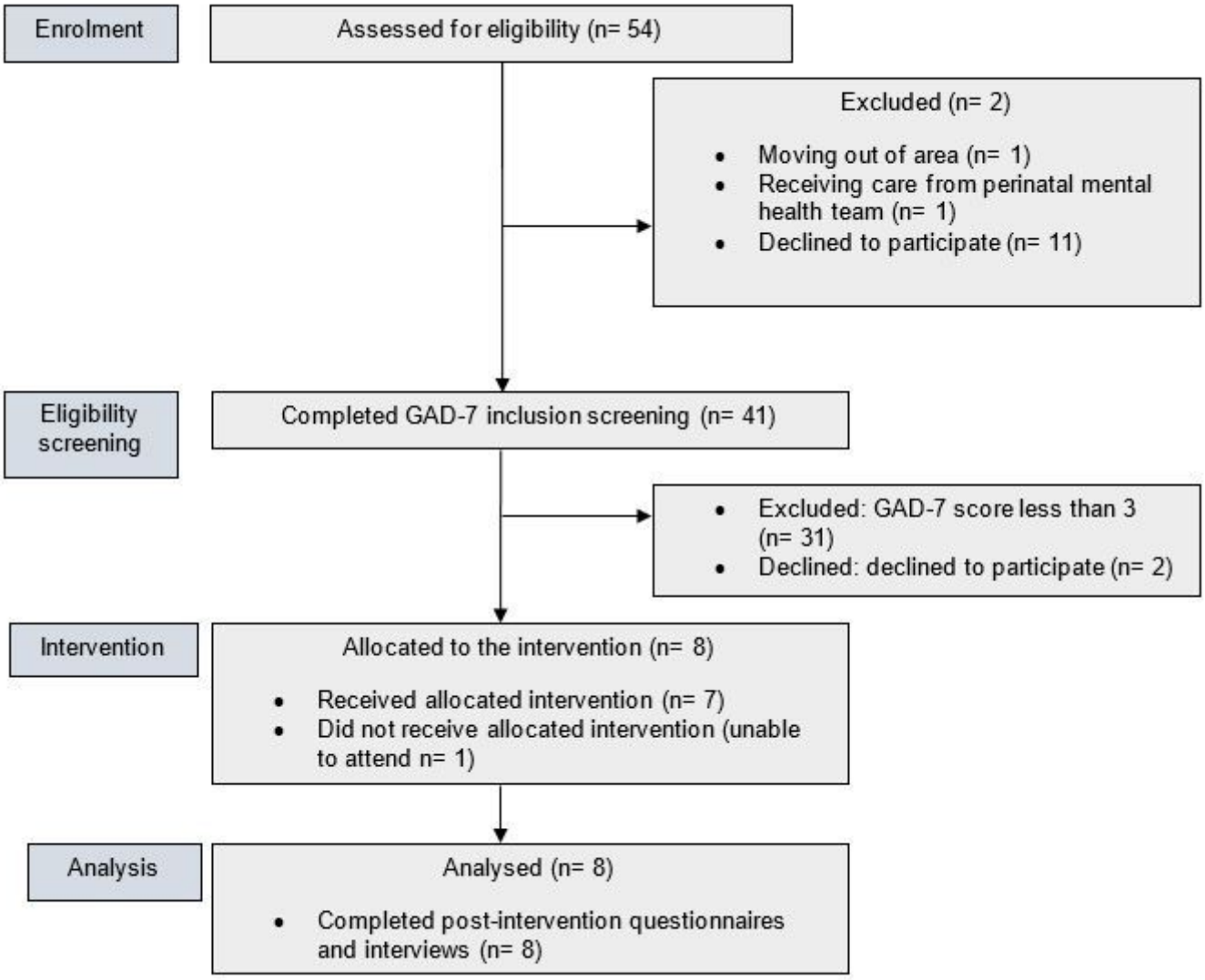

Figure 1

Participant flow diagram for the feasibility study

Supplementary Files

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