Author's response to reviews

Title: Peer-mentoring for first-time mothers from areas of socio-economic disadvantage: a qualitative study within a randomised controlled trial

Authors:

Christine A Murphy (christine.murphy@belfasttrust.hscni.net)
Margaret E Cupples (m.cupples@qub.ac.uk)
Andrew Percy (a.percy@qub.ac.uk)
Henry L Halliday (h.halliday@qub.ac.uk)
Moira C Stewart (m.c.stewart@qub.ac.uk)

Version: 4 Date: 9 January 2008

Author's response to reviews: see over
9 January 2008

Corresponding Author:
Dr Margaret E Cupples
Division of Public Health Medicine and Primary Care, Queen’s University
1 Dunluce Avenue, Belfast
BT9 7HR
Northern Ireland

Dear Editor

Thank you for your email of 7 December 2007 re FW:644953695102059 - We are grateful to your reviewers for their thorough assessments of our paper and have responded to their comments (reviewer comments are shown in italics) below.

We have also included a statement in the Methods section indicating that informed consent was obtained for the RCT, in addition to a later statement that consent was given by interviewees.

Referee 1:

The intervention needs to be described in more detail.

This has been done by stating the information given to potential participants (pages 5-6)

‘Before agreeing to take part they were told that their participation might involve receiving two-weekly visits from a mentor, a lay person (not a professional health or social care worker) who would be a mother who lived in the same locality as they did and who had at least one young child, and that the visits would be arranged to suit them, would normally take place in their own home and would continue throughout pregnancy and for one year after the child was born. During the visits they would be offered advice about their own and their baby’s healthcare and help in accessing professional health and social care services as required. If they agreed to participate their mentor would telephone them as soon as possible after their hospital appointment. Participation would also involve filling in questionnaires about their health, lifestyle and parenting experiences, having an additional ultrasound scan to observe the baby’s behaviour at 29 weeks of pregnancy, and allowing researchers to access their infant’s medical records and perform a physical examination of the child at one year. This information was given to them in writing and they were invited to ask questions to ensure their understanding.’

Were the topics introduced in a structured format, were there specific teaching materials and leaflets that the mentors used? Or was it all based on them remembering information from their teaching sessions?
We have now described the training programme in more detail. The sequence of topics introduced is shown in Figure 1 and we have stated that specific teaching materials (handouts and health promotion leaflets) were used (page 7).

‘In addition to being given written handouts highlighting the major issues, mentors were given written materials (such as leaflets produced by the Health Promotion Agency, Northern Ireland) which they could share with the women whom they mentored.’

In the results: 'Fetal behaviour scans' are mentioned -were they an extra bonus of being in the trial or standard care?

These scans were a ‘bonus’ of being in the trial – as now indicated (page 6). They were used as an outcome measure, carried out at 29 weeks’ gestation, in both intervention and control groups. This information was given to the participants prior to their consenting.

Midwives also seem to imply that they thought the intervention was a structured programme. If it was not, then this should be highlighted.

The intervention was a structured programme in so far as this relates to the topics which were to be discussed by mentors and the intended frequency of visits but the sequence in which topics were dealt with was to be tailored to the women’s needs i.e. prioritised in relation to any immediate queries or difficulties they were experiencing, and whilst contact was intended to be two-weekly, visits were to be planned in accordance with their wishes and perceived need.

In discussion: Peer mentors should be providing evidence-based information and advice not just that based on personal experience. Their personal experience may add to what they say but should not be the basis of their information.

This is true – their personal experiences were shared in addition to giving standard evidence-based information in accordance with that contained in health promotion leaflets and taught during our training courses. We hope this point is now clarified in the discussion (page 16):

‘… highlights the unique way in which peer mentors can provide social support and health information in the context of personal experience.’

Minor Essential Revisions
In results: External influences -involvement of others -5th line of this paragraph’
Women reported THAT one-to-one visits’.
Authors contributions: CM analysed and coded (delete DID)
The contribution of MC has been duplicated.
HH ‘the randomized controlled trial WITHIN which this took place.’

All the above revisions have been made accordingly.
Referee 2:

We thank the reviewer for her comment that the paper makes an important contribution to an area of health care provision that continues to be popular but for which the evidence remains inconsistent. We appreciate her statement that exploring potential difficulties within such a programme provides an important step in making programmes more effective.

1. Background – I feel that there needs to be more information on the original RCT (is there a reference for this?). Specifically I would like to know the aim of the RCT, what was expected of the mentors and what outcomes were measured.

We have added further detail about the RCT in our Background section, including its aim and outcome measurements (page 5). The paper reporting the RCT findings has not yet been submitted for publication. The information about what was expected of mentors is included in the section relating to mentor training (page 6/7). The relevant sections are copied below:

‘We conducted a randomized controlled trial (RCT) of peer mentoring of women, living in areas of socio-economic disadvantage, who became first-time mothers. Our objective was to determine whether peer mentoring support during pregnancy and the first year of infant life could improve child health and maternal outcomes. The primary outcome measures recorded at one year after birth were the Bayley Scales of Infant Development (assessing mental, motor and behavioural performance), and the SF-36 (assessing maternal physical and mental health). Secondary outcomes included assessment of fetal behaviour, birth gestation, infant feeding, growth at one year, immunization uptake, parental efficacy, maternal diet, smoking, alcohol and drug use, and use of health and social services.’

‘Mentors were advised that their role was to identify health and social care needs of the women, to ensure awareness of health promotion information and to provide non-professional social support. The limitations of their role were emphasized and they were told how to refer women to appropriate statutory or voluntary services if they had specific queries regarding their health or social care. If there was any doubt about appropriate action, mentors were encouraged to contact the midwives directly for advice.’

2. Sample – a separate section outlining purposive selection and maybe some of the characteristics of the women (and mentors) who were actually interviewed would be helpful. Why were the 12 women selected? There is the risk of only asking those who had successful experiences to take part so more information on the selection of the women would be useful.

We have now shown information regarding selection of interviewees more clearly within the methods section, under the sub-heading ‘Data Collection’ (page 8) and have given further detail about the characteristics of the women who were interviewed in Table 1. We purposively selected women and mentors with a range of mentoring experiences.
Purposive samples were selected for invitation to participate in this qualitative study. Mentors were selected to include a range of age, locality, work experience, family composition and mentoring experience. Women were selected to include different ages, localities and mentor experiences. With their consent, semi-structured one-to-one interviews were conducted with mentors, women and research midwives, beginning (‘early interviews’) nine months after the start of the trial, so that the process of mentoring had become established. Interviews with six mentors were conducted and analysed before interviewing women and midwives. After an initial analysis further interviews (‘later interviews’) with mentors, women and midwives began approximately one year later. Selected mentors and women were each interviewed only once in order to maximise sample diversity; both research midwives were interviewed at both stages of the study.

There is also mention of AN and PN samples but it is not clear how this is achieved as I imagine one mentor would follow women through from AN to PN? Does a PN sample therefore indicate more experience on the part of both the women and the mentor?

We regret having caused confusion by our terminology. Women selected for what we have now termed ‘early interviews’ (as above) were interviewed towards the end of their antenatal period and those in the ‘later interviews’ were postnatal. However, whilst we intended that one mentor should follow a woman through pregnancy to one year postnatal, when some mentors resigned the women whom they mentored were assigned ‘new’ mentors. Mentors therefore varied, as did women, in their experience of mentoring.

Differences between AN and PN samples may highlight the importance of a developing relationship (or maybe it doesn’t) and would be worth exploring further.

This idea may be worth exploring further but we do not feel we have sufficient information to comment further. We have added a comment to reflect this in our limitations section of the discussion (page 18):

Whilst we identified that good peer-mentor relationships are important in ensuring uptake of programmes, we did not attempt to assess the strength of friendship bonds within relationships. Also, because we wished to include as wide a range of experiences as possible, we did not re-interview the same women or mentors, so that we cannot assess changes within individuals’ experiences or perceptions over time. We did not attempt to validate reports by comparing interviews of women and their assigned mentors because we did not wish participants to perceive any possible barriers to frank disclosure of their experiences.

Although the use of different samples AN and PN may indicate differences in personalities of those interviewed rather than changes over time and so a comment on this in the discussion may be helpful.

We have added a comment to this effect in the discussion (Page 17/18), as below:
‘In our earlier interviews mentors reported a sympathetic approach, to difficulties in contacting women, which was not identified in later interviews. Whilst it may be suggested that the personalities of mentors involved in ‘later interviews’ differed from those involved in the ‘early interviews’, we do not consider that this was so. Observations by the project manager confirmed that the research midwives became more persistent in their questioning of mentors’ progress over the course of the trial as they became more aware of the difficulties and the consequent implications for failing to meet trial recruitment targets and adverse effects on mentor morale. They felt mentors were reluctant to admit failure initially but became less so as, in ongoing support meetings, shared experiences revealed that others had similar difficulties.’

We regret having caused confusion in our description of the sample and sequence of interviews, we hope that we have clarified this now as on page 5 and in response to point 2 above and point 3 below:

3. Data collection – does early interview and later interview mean AN and PN interview? This is not clear.

No, not necessarily – as explained above. ‘Early’ interviews were at the end of the antenatal period for women but ‘early’ mentor interviews were not solely confined to antenatal experience.

‘semi-structured one-to-one interviews were conducted with mentors, women and research midwives, beginning (‘early interviews’) nine months after the start of the trial, so that the process of mentoring had become established. Interviews with six mentors were conducted and analysed before interviewing women and midwives. After an initial analysis further interviews (‘later interviews’) with mentors, women and midwives began approximately one year later.’

Fig 2 indicates interview topics – more information is needed on how these were devised.

We have added information that these were based both on the project manager’s knowledge of difficulties encountered and on the basis of previous literature (page 8):

‘Questions were based on the findings of previous trials of lay worker support for mothers and on the project manager’s observations of the RCT implementation (Fig. 2).’

4. Results:

4.1 Comment 1.3 – what was the question asked here? This response seems not to fit with the others and it is unclear if the midwife was asked a “what would you have done question”. I think it would be helpful to include the question to which the midwife was responding.

We have revised the presentation of quotes, in accordance with journal style. We have added information about the question asked and hope the section (page 10) is now clear-
‘In response to being asked about their role in management of mentors, the midwives reported that they recognised a need to support mentors in initiating contact in order to try to encourage mentors to stay in the programme.
‘If they (mentors) were having any difficulty getting in touch with the mums we would have taken that off them and we would have tried to get in touch with them or we would have spoken to them then whenever they came up to the clinic’ (Midwife 1, Early interview)

4.2 Comments 2.4 and 2.5 – it is unclear who the midwife is talking about – mentors or women?

Again we have now removed numbers from quotes- the relevant quotes (page 11) are shown below and explained by adding the relevant subject in brackets within the quote.

‘A lot of the girls(women) maybe just come into the study, maybe not for the mentorship part of it, maybe only they like the idea of the baby outcome, the scan, they haven’t really thought about the mentorship part’ (Midwife 1, Early interview)

‘...I really don’t think they (mentors) realised what the job entailed, it just wasn’t going in for a cup of tea and a chat about your new baby that they actually had to introduce the diet, domestic violence, feeding etc. I am not sure, some of them just did a couple of visits and then said ‘no thanks’. (Midwife 1, Early interview)

4.3 In this section there was also mention of “idea of baby outcome” – what does this mean? Did the mentors do something with the mother? Or was the mother offered something if she took part in the study? Maybe this information could be included in the background information on the original RCT.

The reviewer is correct in understanding that there was a ‘baby outcome’ – the mother was offered an additional fetal behaviour scan if she took part in the study. This was done by a research midwife in hospital and is now explained in the background section of the paper and also in the Methods section (page 6), as below:

‘Participation in the trial would also involve filling in questionnaires about their health, lifestyle and parenting experiences, having an additional ultrasound scan to observe the baby’s behaviour at 29 weeks of pregnancy’

4.4 Ethnicity was outlined as influencing peer mentoring – were any women from ethnic backgrounds included in the purposive sample? If so it would be useful to include some comments from them in this section. If they weren’t then this should be highlighted under limitations.

We have added relevant comments to the limitations section of the discussion, as below:

‘It must be acknowledged that we did not interview any women from different ethnic backgrounds. The number of these who took part in our RCT was small as there was a low prevalence of ethnic diversity in the target population in Belfast at the time of
the study. Of the 10 women from different ethnic backgrounds who participated in the intervention arm of the RCT we had hoped to interview at least one at the later stage of the study but none was available – some having returned to their country of origin and all having moved out of the area.’

5. Discussion – the first paragraph discusses that retention of mentors was related to the difficulties outlined. Were mentors who resigned included in the interviews? If so maybe a section which compared those who left with those who resigned could be included. If mentors who had resigned were not included then this paragraph becomes unsupported.

Mentors who resigned were not included in the interviews but were included in a postal questionnaire. This information was included previously but we have now highlighted it by re-wording and expanding the sentence supporting our statement. It appears at the end of the ‘limitations and strengths’ section in the discussion (page 19):

‘Perceptions of the adverse impact of initial contact difficulties on mentor morale and time management were confirmed by the questionnaire responses. These, alongside mis-perceptions of what mentoring involved, difficulties in establishing relationships with women assigned to them and alternative employment opportunities, usually with less need for flexibility in working hours, were confirmed as contributing reasons for resignation.’

6. Limitations – the first sentence is fine but the remaining content under limitations should be included within the methods sections.

We have now included this content within the Methods section, partly under ‘Data collection’ and partly under ‘Data analysis’ subheadings. However, we have retained some of the information and added further to the original limitations section, as in response to Comments 2, 4 and 5 above. If so wished, we are happy to remove the detail shown below or to present this within the Methods section only:

7. Conclusions – I didn’t really feel that the study highlighted the value of mentoring but rather highlighted the difficulties. Published studies have already highlighted the value of peer support but this is the first (to my knowledge) which has conducted a more in-depth exploration of the difficulties and this should be emphasised.

We agree that whilst the study reported perceptions of value in mentoring and revealed insight into the aspects of mentoring that were appreciated by women, our aim was to explore the difficulties and it was these which the study has highlighted. In accordance with this accurate comment we have altered the emphasis of our conclusion (page 20/21):

‘Exploration of experiences within a research trial of a peer-mentoring programme for first-time mothers in a disadvantaged area has revealed how difficult it is to communicate clearly what the role of a mentor involves to both lay-workers and potential recipients of such a programme. It is important to outline what the scheme will mean for participants and clarify their understanding and expectations. There are difficulties in defining limitations for the outworking in practice of the ‘social capital’
invested within the concept of friendship/social support for women and their mentors. It is difficult also to specify the expected personal gain for participants or predict the time and effort required by mentors in achieving effective delivery of a programme to individual women.

The challenges for mentors in making contact with intended programme recipients should not be underestimated. Potential mentors require communication and time management skills and a level of self-confidence which enables them to deal with difficult home-visiting situations and to share problems with health professionals. Clarification of these details is relevant to improving uptake of such schemes and retention of lay-workers within them. This knowledge should be used in further evaluation of the effectiveness and cost-effectiveness of lay-worker schemes for improving health outcomes for mothers and their children living in areas of socio-economic deprivation.’

Minor Essential Revisions

1. Introduction – the research question appears in the last paragraph of the introduction. This paragraph would benefit from restructuring to make the aim of the qualitative study absolutely clear.

This paragraph has been re-structured, more detail about the context of the work added and hopefully it is now clear (Page 5).

‘Within the context of the randomized trial we used qualitative methods to explore the difficulties experienced by lay-workers, women and health professionals involved in the peer-mentoring programme. The qualitative findings are reported in this paper.’

Discretionary Revisions (which the author can choose to ignore)

We thank the reviewer for her careful consideration of the structure of our paper and have revised our presentation – the specific examples shown below have been re-phrased and others in text also altered.

1. Over all I felt that the construction of some of the sentences was confusing with the main point often being found at the end:
   “For 25% of women allocated to receive mentoring, initial mentor contact was never achieved.”
   Now reads (page 10):
   ‘Initial mentor contact was never achieved for 25% of the women allocated to receive mentoring.’

   or with two different concepts linked in a manner which made the meaning unclear:

   "They felt that women understood their intended role poorly and attempted to
develop relationships with them by sharing personal experiences and offering friendship; women who participated in the programme appreciated this."

In the above sentence ‘poorly’ needs to come earlier in the sentence as I initially read this sentence as meaning that women understood their intended role. There were other instances of this type of sentence structure in the paper.

We have addressed this by separating these concepts so that relevant sentences (in the Abstract) now read:

‘Despite attempts to ensure that the role of the mentor was understood clearly it appeared that this was not achieved. Mentors attempted to develop peer-mentor relationships by offering friendship and sharing personal experiences, which was appreciated by women.’

Referee 3:

We thank this referee for her comment that our study is useful and adds to the knowledge about why some interventions (in this case peer mentoring) are difficult to implement even in a research setting. The complexities of the intervention, as well as the challenges inherent in implementation, are important to explore and report.

We have added some discussion of the challenge of understanding complex interventions to our paper (page 19/20), as below.

‘The findings inform planning and delivery of future programmes which involve a complex health service intervention [22] such as peer-mentoring. Various components may contribute to the effectiveness of such programmes, including details of the intervention itself (mentor training, information given to women, strength of peer-mentor relationships, frequency and duration of contact), the women (interest in health or lifestyle change, personal experiences, other ‘advisors’), mentors (level of skill, availability and flexibility of time, own experiences) and health professionals (willingness to allow mentors autonomy, identification of mentor needs, availability) and the social environment in which the mentoring takes place, both in the immediate family setting and the wider community. The design and evaluation of such interventions present challenges [23] and require careful consideration of these possible interactions. Understanding an intervention makes an important contribution to development of its evaluation and the provision of information which is meaningful for translation into health service policy and practice.’

More information on the program is required.
We have now included more detail about the RCT in the Background (page 5/6) and in information about the training programme on page 6/7 – and copied below. (Further information given to women prior to inclusion is shown in the Methods section, on Page 6)

‘We conducted a randomized controlled trial (RCT) of peer mentoring of women, living in areas of socio-economic disadvantage, who became first-time mothers. Our objective was to determine whether peer mentoring support during pregnancy and the first year of infant life could improve child health and maternal outcomes. The primary outcome measures recorded at one year after birth were the Bayley Scales of Infant Development (assessing mental, motor and behavioural performance), and the SF-36 (assessing maternal physical and mental health). Secondary outcomes included assessment of fetal behaviour, birth gestation, infant feeding, growth at one year, immunization uptake, parental efficacy, maternal diet, smoking, alcohol and drug use, and use of health and social services.’

‘Mentors were selected following response to advertisements in local press and community centres. They were of similar age to the participants, lived in the same localities and had at least one child under 10 years of age. They were paid travelling and telephone expenses and £6 for every hour spent in association with the programme, including participation in training sessions. At the start of the trial mentors were given, in each of the first three weeks, one formal two hour training session at which the programme and the role of the mentor were explained. Mentors were advised that their role was to identify health and social care needs of the women, to ensure awareness of health promotion information and to provide non-professional social support. The limitations of their role were emphasized and they were told how to refer women to appropriate statutory or voluntary services if they had specific queries regarding their health or social care. If there was any doubt about appropriate action, mentors were encouraged to contact the midwives directly for advice.

The RCT project manager (CM) organized the training in collaboration with the two research midwives. Information relating to pregnancy, postnatal self-care, infant care, communication skills and awareness of safety issues in conducting home visits was delivered by health and social care professionals (Figure 1). In addition to being given written handouts highlighting the major issues, mentors were given written materials (such as leaflets produced by the Health Promotion Agency, Northern Ireland) which they could share with the women whom they mentored. The mentors had direct telephone access to the midwives from 08:00 to 18:00 on weekdays and either by leaving a message for a return call or by the project manager's mobile telephone at other times. Midwives contacted mentors at approximately two-weekly intervals if they had not initiated contact during that time.

Further training was provided as deemed appropriate by the midwives, subsequent to the mentors encountering difficulties or questions. Mentor group meetings took place every six to eight weeks, at mutually convenient times and settings, when peer support was available through sharing of experiences. The research midwives attended these meetings but gave the mentors opportunity to talk together informally. Following mentors resigning from the programme, the midwives trained replacement mentors on a one-to-one basis, or in small groups if possible, placing initial focus on topics most pertinent to the stage of pregnancy of the women assigned to them. Further training took place
through the ongoing mentor support meetings. Each mentor self-completed a training log throughout the programme.
Mentors contacted the women assigned to them as soon as possible after their clinic visit, to provide support, through home visits by telephone, tailored to individual needs.’

We hope that we have addressed the queries raised to the reviewer’s satisfaction.

The reviewer asks – ‘Could more training and/or support to the mentors assisted with providing more clarity or purpose?’

In response, we suggest that we attempted to make the role of the mentor clear in our training but obviously could have done better. We comment on this in our discussion (page 16):

‘However, our findings suggest that the purpose and planned outcomes of our programme could have been explained more clearly. Participants’ reports provide insight into women’s low expectations of personal gain from the programme and some mentors’ understanding of ‘mentoring’. These perceptions may be helpful in future mentor training and when inviting women to take part in such programmes.’

The authors say they used ‘grounded theory’ however there is a limited sense of categories or a core category. Perhaps they used some of the techniques in grounded theory to collect and arrange the data but not the methodology itself.

The reviewer is correct in that we used techniques of grounded theory in our arrangement of data and we have amended our section relating to data analysis accordingly (page 9).

‘Interviews were transcribed verbatim into Microsoft Word and analysed by two researchers independently [18] (CM, AP) using principles of grounded theory [19] to develop a coding framework.’

The use of the term ‘deviant cases’ seems inappropriate in such a study (while I know what it meant – perhaps there is a clearer way to say it).

We have amended the reference to ‘deviant cases’ as copied below (page 9):

‘These explanations for the data were then compared with the original transcripts to ensure consistency and identify any cases where views expressed differed from those described in relation to each theme.’

In the Results section, more clarity is required. How ere the 12 women from 129 selected to be invited for this study. What were their characteristics? How was the decision made about who to approach? Were they purposively selected? On what grounds? …… Some comparison on some basic demographic characteristics between the responders and the total sample would be helpful to assess whether they were similar to the whole sample.
Interviewees were selected purposively and we have now shown relevant characteristics in Table 1 and described our selection criteria in the Methods section, under the sub-heading’ Data Collection’ (page 8) (copied below). In order to preserve confidentiality we have not shown the various areas in which they lived but each woman interviewed lived in a different postcode area.

‘Purposive samples were selected for invitation to participate in this qualitative study. Mentors were selected to include a range of age, locality, work experience, family composition and mentoring experience. Women were selected to include different ages, localities and mentor experiences.’

The numbers in the text and quotes requires explanation.

We have removed the numbers and boxes containing numbered quotes from our manuscript. The quotes are now included within the text, with numbers removed.

I am not sure about the difference between earlier or later interviews (page 6). Does this mean antenatal and postnatal or is it due to timing in the study?

We are sorry to have caused confusion by this terminology. These terms refer to timing in the study and this has now been explained within the text as below (page 8):

‘With their consent, semi-structured one-to-one interviews were conducted with mentors, women and research midwives, beginning (‘early interviews’) nine months after the start of the trial, so that the process of mentoring had become established. Interviews with six mentors were conducted and analysed before interviewing women and midwives. After an initial analysis further interviews (‘later interviews’) with mentors, women and midwives began approximately one year later.’

The lack of understanding about the RCT is very interesting. More information about the information women received prior to consenting would be helpful. The behaviour scans mentioned on page 7 are confusing. This needs to be explained.

More information about the RCT and the information given to women before consenting has now been included (page 6) which indicates that the behaviour scan referred to is an outcome measure used within the RCT – as below:

‘Before agreeing to take part they were told that their participation might involve receiving two-weekly visits from a lay person (not a professional health or social care worker) who would be a mother who lived in the same locality as they did and who had at least one young child, and that the visits would be arranged to suit them, would normally take place in their own home and would continue throughout pregnancy and for one year after the child was born. During the visits they would be offered advice about their own and their baby’s healthcare and help in accessing professional health and social care services as required. If they agreed to participate their mentor would telephone them as soon as possible after their hospital appointment. Participation
would also involve filling in questionnaires about their health, lifestyle and parenting experiences, having an additional ultrasound scan to observe the baby’s behaviour at 29 weeks of pregnancy, and allowing researchers to access their infant’s medical records and perform a physical examination of the child at one year. This information was given to them in writing and they were invited to ask questions to ensure their understanding.

Some of the terms in the quotes need explanation for an international audience – eg – the ‘parentcraft’ on page 7. Is this classes or groups and when does it occur?

‘Parentcraft’ refers to classes provided as explained, in the antenatal period (i.e. during pregnancy) (page 13) by midwifery staff at night and involving women and their partners:

‘….. ‘what about the parentcraft?’ (group classes, giving information about pregnancy, labour and childcare)’

The issues of local dialect also needs description. Were these women from a range of language groups? More information about the demographics of the sample is needed.

The women all lived within the greater Belfast area. The paragraph refers to women from minority ethnic groups included in the study, whose native languages were not English and who had relatively recently come to live within the area. Some quotations reveal what would be construed as ‘local dialect’ (such as “have to be a bit wise” or “a bit disheartening like”) but the wording of this paragraph has been changed (page 13):

‘Mentors reported communication difficulties with women of different ethnic backgrounds; these women could speak English but at times they appeared to lack understanding. This was sometimes attributed to a failure to understand local sayings, ‘slang’ words or culture and was perceived to be a barrier in developing the peer-mentor relationship.’

The title of the paper refers to young women but it seems that women from 16 to 30 years were recruited. How many of them were less than 20 years? Is 25-30 years really considered to be ‘young’.

On consideration of this question, whilst we would suggest that younger, rather than older, mothers are aged less than 30 years, we have removed this term from our title. Of our RCT participants 35.2% were aged 16-20 years and the remainder (64.7%) were aged less than 30 years.

The Discussion is rather brief and is limited in its exploration of the issues as to why these challenges and difficulties arose. Issues around training, ongoing support, building community partnerships and resilience could be explored in more depth. Understanding complex interventions and the diffusion of innovation might be useful frameworks to user when widening the exploration of the issues.
We have extended our discussion and thank the reviewer for the suggestion to include comment relating to the understanding of complex interventions and issues relating to training and support – some excerpts are shown below:

‘Observations by the project manager confirmed that the research midwives became more persistent in their questioning of mentors’ progress over the course of the project as they became more aware of the extent of the difficulties and the consequent implications for failing to meet targets for trial recruitment and adverse effects on mentor morale. They felt mentors were reluctant to admit failure initially but became less so as, through the process of ongoing support meetings, mentors shared experiences and realised that others had similar difficulties.’

‘The findings inform planning and delivery of future programmes which involve a complex health service intervention [22] such as peer-mentoring. Various components may contribute to the effectiveness of such programmes, including details of the intervention itself (mentor training, information given to women, strength of peer-mentor relationships, frequency and duration of contact),……………..’

Referee 4:

*It might have been more helpful to the readers of this paper if:
*The criteria for selection of the 'lay-workers' had been described early in the paper;

We have included a sub-heading in the Methods section to help the reader identify these criteria easily:

‘Mentor selection and training
Mentors were selected following response to advertisements in local press and community centres. They were of similar age to the participants, lived in the same localities and had at least one child under 10 years.’

*Description and discussion of the mentor training had been provided;

Further information has been added regarding mentor training in the Methods section and discussion of proposals for future training has been included in the Discussion section.

‘Mentor selection and training
Mentors were selected following response to advertisements in local press and community centres. They were of similar age to the participants, lived in the same localities and had at least one child under 10 years of age. They were paid travelling and telephone expenses and £6 for every hour spent in association with the programme, including participation in training sessions. At the start of the trial mentors were given, in each of the first three weeks, one formal two hour training session at which the programme and the role of the mentor were explained. Mentors were advised that their role was to identify health and social care needs of the women, to ensure awareness of health promotion information and
to provide non-professional social support. The limitations of their role were emphasized and they were told how to refer women to appropriate statutory or voluntary services if they had specific queries regarding their health or social care. If there was any doubt about appropriate action, mentors were encouraged to contact the midwives directly for advice.

The RCT project manager (CM) organized the training in collaboration with the two research midwives. Information relating to pregnancy, postnatal self-care, infant care, communication skills and awareness of safety issues in conducting home visits was delivered by health and social care professionals (Figure 1). In addition to being given written handouts highlighting the major issues, mentors were given written materials (such as leaflets produced by the Health Promotion Agency, Northern Ireland) which they could share with the women whom they mentored. The mentors had direct telephone access to the midwives from 08:00 to 18:00 on weekdays and either by leaving a message for a return call or by the project manager's mobile telephone at other times. Midwives contacted mentors at approximately two-weekly intervals if they had not initiated contact during that time.

Further training was provided as deemed appropriate by the midwives, subsequent to the mentors encountering difficulties or questions. Mentor group meetings took place every six to eight weeks, at mutually convenient times and settings, when peer support was available through sharing of experiences. The research midwives attended these meetings but gave the mentors opportunity to talk together informally. Following mentors resigning from the programme, the midwives trained replacement mentors on a one-to-one basis, or in small groups if possible, placing initial focus on topics most pertinent to the stage of pregnancy of the women assigned to them. Further training took place through the ongoing mentor support meetings. Each mentor self-completed a training log throughout the programme.

‘We sought to take account of these difficulties in our selection and training of mentors; the research midwives were totally committed to the project. However, our findings suggest that the purpose and planned outcomes of our programme could have been explained more clearly. Participants’ reports provide insight into women’s low expectations of personal gain from the programme and some mentors’ understanding of ‘mentoring’. These perceptions may be helpful in future mentor training and when inviting women to take part in such programmes.’

*All women and mentors who were interviewed in the antenatal period had been interviewed after the birth;*

We have discussed our reason for not doing so and stated this explicitly in the Methods section, under the sub-heading of ‘Data collection’ and as a limitation of our study:

‘Selected mentors and women were each interviewed only once in order to maximize sample diversity.’

‘Also, because we wished to include as wide a range of experiences as possible, we did not re-interview the same women or mentors in early and later stages of the study, to attempt to assess changes within individuals’ experiences or perceptions over time. We did not attempt to validate reports by comparing interviews of individual women and their assigned mentors because we did not wish participants to perceive any possible barriers to frank disclosure of their experiences.’
Comment

*A flow-chart of participation, retention and loss had been provided - despite the small numbers in each category;

We have included a figure showing progress of participants through the RCT to interview stage and hope this is helpful. (Figure 3)

*More explicit attention -in the planning phase -had been given to low uptake in earlier studies of mentoring/extra support: e.g. references 11, 13, 14;

In the planning phase of our study we were aware of difficulties noted in previous studies and we had considered that we had paid attention to these in our selection of mentors- eg from same locality, no travelling issues, giving a clear explanation of the mentor role. However, as acknowledged within our discussion, our efforts were insufficient and we have made suggestions which we hope will be useful to others. We ensured availability of ongoing support for the lay-workers but noted that the impact of this was more noticeable in the later stages of the study.

* The authors' conclusions had reflected what actually occurred in the implementation of the study.

We recognise that our emphasis within this section was inappropriate and have amended our conclusion as follows:

‘Conclusions

Exploration of experiences within a research trial of a peer-mentoring programme for first-time mothers in a disadvantaged area has revealed how difficult it is to communicate clearly what the role of a mentor involves to both lay-workers and potential recipients of such a programme. It is important to outline what the scheme will mean for participants and clarify their understanding and expectations. There are difficulties in defining limitations for the outworking in practice of the ‘social capital’ invested within the concept of friendship/ social support for women and their mentors. It is difficult also to specify the expected personal gain for participants or predict the time and effort required by mentors in achieving effective delivery of a programme to individual women.

The challenges for mentors in making contact with intended programme recipients should not be underestimated. Potential mentors require communication and time management skills and a level of self-confidence which enables them to deal with difficult home-visiting situations and to share problems with health professionals. Clarification of these details is relevant to improving uptake of such schemes and retention of lay-workers within them. This knowledge should be used in further evaluation of the effectiveness and cost-effectiveness of lay-worker schemes for improving health outcomes for mothers and their children living in areas of socio-economic deprivation.’
We hope we have addressed the reviewers’ concerns and illustrated our response clearly in the above. If you wish any further clarification please do not hesitate to contact me.

Thank you very much for your helpfulness.

Yours sincerely

Margaret Cupples