



# Summary of the formative evaluation of the first phase of the group-based Family Nurse Partnership programme

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## Executive Summary

### What is Group FNP?

Two sites in England providing the home-based Family Nurse Partnership (FNP) programme have, since 2009, also been providing a second programme, based on the original with the same aims and curriculum content but presented in a group setting and lasting until infants are 12 rather than 24 months. The second programme, Group FNP (gFNP) is offered to women not eligible for FNP. Two Family Nurses (FNs) present the programme, one of whom is also a qualified midwife and the other a qualified health visitor.

Group members are recruited before 16 weeks gestation and ideally have delivery dates within 4-6 weeks of each other. In addition to the FNP content there is time in the two hour meeting for routine health checks of the pregnant women and later of their infants. Mothers are encouraged to be responsible for conducting the checks, with guidance from the FNs. Meetings are held at a local Children's Centre.

*It is somewhere where you can advice or, if you don't want advice, you can be told about different things that might help you. You get to talk to people who have different experiences so it's always beneficial for you in some way.*

*It's an interesting group; it will allow you to learn things that you already think you know but you really don't know. You think you know what you need to give to your babies but sometimes it is not actually what you were thinking.*

*It's brilliant and worth the effort, it is not like other parenting groups. I think it is different because it is small and they are not throwing things at you. They spend time with you. You don't learn in a boring way, it's not a textbook.*

*I would say it is great. I talk about it all the time to my other friends. They say "I wish I had that when I was pregnant" and I say "Well I am special that is why I got picked!"*

*It's a group of mums and they go through every step together and you are discussing and learning things together. I looked forward to getting her all wrapped up and putting her in the pram and walking down. I was really proud that I was a new mum and we were all new and we would all hold them and cuddle them in the group.*

### Were the eligibility criteria suitable and workable?

Eligibility for referral to gFNP entailed either being 18-19 and expecting a second child or aged 20 to 25 and expecting a first or subsequent child, with gestation ideally 12 weeks at referral. The aim was for all expected delivery dates for the group to be within 4-6 weeks of each other.

The selection criteria for gFNP were workable. The main challenges were to identify a sufficient number with due dates close together and identifying women soon

enough in their pregnancies. Very few referrals in either location had gestations of less than 12 weeks and was possibly too ambitious a target.

The clients recruited were by design different from clients receiving the home-based FNP programme, also being offered in each location. The gFNP clients were on average older, with more qualifications, more likely to have been employed and in higher status work and more were living with their partner. To reach a more vulnerable population it is likely that additional criteria beyond age, location near the children's centre and gestation.

### **How effectively can Group FNP be delivered?**

During the infancy phase attendance at group sessions was on average between half and two thirds of enrolled clients (range 30-100%) with no marked change between early and late infancy. Clients usually told the FNs in advance if they could not attend, particularly in late infancy.

The stretch objective for individual FNP is to deliver at least 80% of pregnancy visits and 65% of infancy visits. The average delivery per client was 75% in pregnancy (range 7-100%; 11/22 above 80%) and 67% in infancy (range 6-100%; 10/20 above 65%). Low attendance was generally related to a return to employment or education or to family commitments.

Both clients and FNs indicated that the presences of the increasingly vocal and mobile infants in late infancy presented challenges, which could be alleviated by the presence of an additional staff member trained in child care. However it was agreed that the presence of the infants allowed for immediate possibilities for modelling play and child management and also allowed mothers to gain confidence in their own parenting skills, with the support of other group members.

### **What factors are related to attrition or retention?**

With such small numbers percentages need to be interpreted cautiously. Attrition was overall 30%, with similar percentages in pregnancy and late infancy (13% each), with very low attrition immediately after the birth if their infants (4%). This corresponds well with the US stretch objective for home-based FNP which are no more than 10% attrition in pregnancy and 20% in infancy.

The groups differed in that one had no attrition in late infancy while the other group had a higher rate, linked with clients' employment.

### **Is Group FNP acceptable to service users?**

The 'tone' of the interactions with the nurses and clients and between the two nurses was commented upon from the outset; clients praising the relaxed atmosphere and the use of humour. They knew that they were in the group to gain information but it was also a pleasant experience.

Clients made every effort to attend after their babies were born only staying away on the whole if they or their infant are unwell. They spoke positively about the way that

the service has helped them in coping with the first weeks, mentioning in particular information about infant feeding and strategies to cope with crying.

Clients described the meetings as both enjoyable and informative and they gained support in terms of their own nutrition, that of their infants, and in terms of learning about how to promote child development. They were able to understand what the benefits the learning might be for themselves and their infants. Activities were informative without being overly didactic. The involvement of 'outside' experts had been appreciated, for example demonstrating infant massage or giving information about the job centre and benefits.

Materials were well received by clients and they enjoyed all the 'hands-on' craft activities and the small group discussion. Coverage of challenging parenting issues such as weaning, for which there were many different viewpoints, had been particularly useful, highlighting a range of views and leading to valuable sharing of advice and experiences.

### **Is Group FNP acceptable to practitioners?**

For nurses the new way of working was exciting and offered them the opportunity to work in a different, more collaborative way, using previously acquired skills in group work in conjunction with the effective materials of the FNP programme.

They noted that achieving 'transformational work' with clients is more important than large amounts of information being imparted. Therefore, after a few sessions they extended discussion time in sessions rather than worrying whether they were providing large amounts of information.

In late infancy FNs worked to support those clients who had other responsibilities such as employment or education but thought that for some a programme ending at 6 months might have been more appropriate. However for most of the clients it appeared that all of the content throughout infancy was important and attendance figures indicated that they continued to find it a valuable experience.

They experienced on-going challenges in infancy due to the lack of a permanent place for equipment, including bulky items required for child health checks and materials for the group's activities, meaning that it all had to be brought from another location for each meeting. The room size also became more important in infancy and was thought to be too small to cope successfully with the group once infants were able to move about.

### **What are the early indicators of efficiency and effectiveness?**

Nearly three quarters of the group members (72%) attempted breastfeeding and 8/18 (44%) were breastfeeding still at 6 weeks. Three mothers were still breastfeeding at 6 months (30% of those ever breastfeeding, 20% of the total). The average age that they stopped breastfeeding was close to 6 months suggesting that the group had provided good support.



The mean birth weight was 3439 grams (range 2660 to 4320) with no significant difference between the sites and the mean gestation was 40 weeks (range 38 to 41). None of the babies needed any time in SCBU. At 6 months child weight was within the average range for most of the infants and development for almost all infants was good.

Mothers demonstrated sensible health related behaviour in terms of good nutrition during pregnancy, smoking and alcohol use. All those who were sexually active reported using birth control and the most common methods were relatively reliable ones, the hormonal implant or the birth control pill. None had become pregnant. Mothers reported learning to be child-centred in their play and language with infants and were aware of home safety issues.

Referrals to other agencies had been made in infancy for more than two thirds, with a focus on housing, safeguarding, child safety, domestic violence and mental health. Clients were making good use of other children's centre services.

### **What changes might be needed for subsequent groups?**

To reduce the likelihood of attrition recruitment to subsequent groups should limit the programme to clients with few or no qualifications and who are not in full-time employment.

Later in infancy it could be useful if an additional staff person looked after the infants for a short time, to allow mothers and FNs to focus on the more detailed and information-heavy aspects of the curriculum.

The mothers reported having developed strong friendships and bonds with each other by late infancy, arranging meetings beyond the group sessions, often using children's centre facilities. FNs could help with this by liaising with the children centre so that a room could be made available.

A dedicated, possibly larger space with room for storage would facilitate delivery of the programme, enabling FNs to spend less time transporting equipment related to health checks and to the group's activities.

## Chapter 1. Introduction

### 1.1 Background

The Family Nurse Partnership (FNP) home-visiting support programme has been successfully offered and provided in England, with evidence of its acceptability to young first-time mothers, their partners and family members, and to the professionals providing the programme (Barnes et al., 2008; 2011). However there are mothers-to-be who might benefit from the programme but who cannot receive the intervention, due to the USA specified inclusion criteria (first time mother, no previous live births; low SES) and the criteria applied in England (e.g. under 20 at conception in most areas, with a maximum age of 22 in selected areas; Hall & Hall, 2007).

Following the success of group-based antenatal care such as the USA *Centering Pregnancy* model, reported to be preferred to traditional care (Ickovics et al., 2003; 2007; Robertson, Aycock and Darnell, 2009) and leading to improved prenatal outcomes such as preterm births among high-risk women (Grady & Bloom, 2004; Williams, Zoltor & Kaufmann, 2009) two sites in England that are providing FNP have, since the Autumn of 2009, also been providing a programme with the same aims and basic curriculum content to mothers not eligible using current criteria. They receive the programme (gFNP) in a group setting rather than as a home-based service and their involvement lasts until their child's first birthday rather than the second birthday that is the completion date for 'regular' FNP. The additional element is the provision of routine health checks of the mothers during pregnancy and of the infants during their first year within the group setting.

In the first English groups the programme was provided by two fully trained Family Nurses, one of whom was also a qualified midwife and the second a fully trained health visitor. Sessions are designed to last for 90 minutes, followed by or preceded by medical checks relevant to the pregnancy or to child development. Following the *Centering Pregnancy* model of working, many of the checks are completed by the clients themselves, guided by the FNs.

The programme provides 14 meetings in pregnancy, weekly for one month and then fortnightly. In infancy sessions are again weekly for one month and then fortnightly, with 30 in total. Meetings take place in a local Children's Centre. Sessions are designed to last for two hours, the first hour to 90 minutes dealing with FNP with the remainder of the time spent on medical checks. Clients are able to have one-to-one time with the midwife or health visitor FN at the end of group sessions or if necessary at their home. Nurses have also made themselves available to answer queries or concerns by text or phone calls outside normal working hours.

Provision of gFNP has also taken place in Denver, USA from 2009 and its evaluation there is ongoing. Planning for gFNP in England began in August 2009 and recruitment started in earnest in October 2010. One site recruited sufficient numbers

and started their group in November 2009. The group in a second site began in December 2010.

Specific research questions addressed in the English pilot are:

1. Which eligibility criteria will identify the intended group and are straightforward to implement in practice?
2. How effective is the recruitment pathway and process?
3. How effectively can group FNP be delivered, in pregnancy and in infancy?
4. In infancy what is the impact of the presence of babies are in the room?
5. Is gFNP acceptable to service-users?
6. What are clients' expectations of nurses and are they realistic?
7. Which elements of the programme engage service-users, and what factors influence their retention in the programme?
8. Is gFNP acceptable to practitioners?
9. What skills do practitioners need to deliver the model successfully?
10. Are there early indicators of efficiency and effectiveness?
11. What changes might be needed for delivering subsequent groups?

## **1.2 Methodology**

### **Referrals and recruitment forms**

The UK050G form lists all the referrals received and their dispositions. Information is included about referral source, date, expected delivery date, enrolment date and (for some) maternal age and gestation at enrolment. Forms were created so that FNs could determine eligibility of each referral for gFNP with whom they made contact so that reasons for ineligibility could be examined but eventually these were only submitted for those clients enrolled in the programme. Written comments were added about each recruitment visit.

### **Reflections after sessions**

Clients are asked to complete four ratings on scales from 1 to 5 after each pregnancy session to indicate how well their needs had been addressed in the group. They were similarly asked to complete three ratings, using 10 point scales, after infancy sessions. The extended scales were introduced in an effort to get more variability in ratings. All pregnancy ratings are based on the first feedback form and ratings of the first six infancy sessions in Site 1. The remainder of Site 1's infancy meetings and all of Site 2's infancy ratings are based on the revised form. They also completed open-ended questions on what they enjoyed or did not enjoy about the session and (for infancy) how happy their baby was during the group.

As soon as possible after each pregnancy session FNs completed a form indicating their thoughts about how the session went including the overall group dynamic, the content covered, and any thoughts about how they could improve future sessions. A slightly modified version was used on infancy.

### **Semi-structured interviews**

#### *a) Professionals*

Face-to-face semi-structured interviews were completed with the 4 FNs conducting the groups and their 2 supervisors at three time points to reflect pregnancy, early infancy and late infancy. In addition an FN who joined gFNP mid-way through the programme was interviewed once. Initial interviews concentrated on the recruitment

phase, issues with midwives and accessing names of clients, availability of accurate details for eligible clients plus any barriers to recruiting effectively. Booking visits were also discussed. They were then asked about preparing the necessary materials, making plans for each group session, time available to complete regular FNP work and supervision. In early infancy questions covered their thoughts about attendance, materials and content of session and their overall experience of the infancy sessions once infants were present. Additional questions dealt with the possibility that each site would add a second group. Similar questions were posed in late infancy.

A semi-structured telephone interview was also conducted with the organisation psychologist responsible for some of the training received by the FNs on running groups.

#### *b) Clients*

Face-to-face semi-structured interviews were completed with 19 of the participating mothers in pregnancy, representing all but one of the 20 who signed a consent form, Most were interviewed at home and after they had attended at least three group sessions. The interviews covered the recruitment process, experience of the first few groups, likes and dislikes and group dynamics and friendships and the relationship with facilitators. Interviews lasted around 45 minutes.

In early infancy interviews were completed with 18 of the mothers when their babies were between 1 and 3 months old. They were asked about the birth of their child, their attendance since giving birth, whether they could bring up topics of concern, likes and dislikes and group dynamics and friendships and the relationship with facilitators. Mothers were also asked if they enjoyed taking their babies to group, the practicalities of attending such as transport and space in the room and to rate the nurses, materials and the difference the group had made.

Later in infancy, when their infants were between 7 and 10 months structured interviews were completed with 14 of the participating mothers, 7 in each site. Some mothers had recently returned to work, attending the group only intermittently, so were not available. They were asked about any reasons for non attendance, which activities they enjoyed and which had influenced them, whether they could be honest and were still learning something new. After each of the interviews they rated on 10-point scales the nurses, materials and difference the group had made to their parenting experiences.

#### **Standardized data forms**

A number of forms were used to collect information about the clients and about programme delivery, based on the standardized forms used for home-based FNP with relevant modifications.

#### *a) Group sessions and other contacts*

Group encounter forms (UK001G) are completed for every enrolled client after each session. From these it is possible to determine whether each enrolled mother attended or was absent, whether contact with the nurses was made regarding non-attendance, and some aspects of each client's behaviour during the session. FNs rate: involvement, understanding and any conflict with the materials on scales from 1

to 5. In addition FNs complete a UK001G (since renamed to make examination of dosage more straightforward) if they meet with any client at any time other than the group sessions, either in their home or in another location. Other forms, completed as needed, are the UK002G which is used when clients are referred to any other service and the UK004G used when a clients drops out of the programme, giving the timing and the reason for leaving.

*b) Maternal health related behaviour*

The UK006G is completed twice in pregnancy (intake and 36 weeks gestation) and at the end of the programme (infant 12 months old) to document maternal smoking, alcohol and illicit drug use.

*c) Relationships*

Repeating questions covered at intake in the UK007G and at 36 weeks in the UK008G, at the end of the programme nurses complete the UK009G with mothers to document any physical or emotional violence in their relationships with family and friends.

*d) Demographic information*

Questions are asked at intake about the mother's demographic background (UK010G) and again at 6 and 12 months (UK011G). The demographics update forms also includes questions about contraception and any subsequent pregnancies.

*e) Infant health and care*

When infants are born the UK012G Infant Birth form is completed with details of their weight, gestation and breast-feeding intentions. Additional information about breastfeeding is collected at 6 weeks (UK012A). When infants are 6 and 12 months the UK013G Infant Health Care is used to record on-going breastfeeding, information about immunizations, hospital visits to treat injuries or ingestion of toxic substances (A&E and inpatient), the child's developmental progress based on the Ages and Stages Questionnaires, any referrals for safeguarding concerns and maternal mental health (the HADS Anxiety and Depression subscales).

### **1.3 Data analysis**

Interviews were all digitally recorded and then transcribed so that themes could be identified. In particular aspects of the programme that are valued, and aspects that have proved a challenge were extracted, and ideas for ways that the programme could be improved. Quotes from FN interviews are not linked with any site or professional to maintain some anonymity. Quotes from client interviews are attributed by number so that it is possible to see that a range of clients' views are represented, but they are not identified in relation to their site.

Quantitative information from interviews such as clients' ratings of the FNs or the materials was collated and mean scores for pregnancy and infancy were calculated. These were supplemented by mean ratings per session based on client and FN feedback forms. Information from data forms, transferred onto Excel submissions is extracted and entered into SPSS for analysis so that client characteristics can be determined and aspects of delivery such as dosage per client and attendance per

session can be calculated. In addition non-attendance and attrition are quantified and reasons for attrition summarised.

## Chapter 2. Eligibility and Recruitment

In this chapter the criteria for being offered gFNP are discussed and the workability of the recruitment process, to address the following questions:

- Which eligibility criteria will identify the intended group and are straightforward to implement in practice?
- How effective is the recruitment pathway and process?

### 2.1 Which criteria should be used?

The eligibility criteria were devised to ensure that group FNP clients were selected on different criteria to regular FNP, with the aim of ensuring that the majority of the information was likely to be available from routine midwifery records.

Analysis of data from the Millennium Cohort Study identified maternal factors that could be determined prenatally and that are associated with poor child learning and behavioural outcomes: under the age of 24 at the child's birth; few or no qualifications; lone parent; income at or below £10,400; language in the home not English; pregnancy unplanned; not bothered or not happy about pregnancy; continues to smoke in pregnancy; not owner occupier; and lives in area with deprivation in the bottom 3 quintiles (Kiernan & Mensah, 2008).

A case of the data routinely available in records in one health trust indicated that consistently available information from midwifery records was limited to maternal age, maternal smoking in pregnancy and the identity of the neighbourhood, so that its deprivation could be assessed, which could act as a proxy for family poverty (Barnes & Howden, 2009). A study in two other trusts concluded that a screening interview used with mothers aged of 20 to 23 to identify vulnerability factors pertaining to educational qualifications and employment could be successfully integrated with routine recruitment for FNP (Barnes & Niven, 2009).

The eventual eligibility criteria for group FNP in fact did not use any additional vulnerabilities and were either:

- 18 – 19 years and expecting their second child; or
- 20 – 25 years old, pregnant with their first child or only one previous live birth.

All group participants needed to be in the early stages of their pregnancy, ideally between 12 and 16 weeks gestation and due dates for group members were required to be within one month of each other. Mothers-to-be needed to be fluent English speakers<sup>1</sup> and have no learning difficulties or mental health problems that would impede participation in the group.

### 2.2 How successfully were the criteria implemented in practice?

#### *a) Number of referrals*

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<sup>1</sup> Future groups may cater for clients who are not fluent in English but will require modification/translation of the materials and the involvement of FNs fluent in the appropriate language.

It was hoped that 10 to 12 would be recruited in each group. A total of 47 referrals were reported on the UK050G forms. Of the 25 for site 1, 14 were contacted and visited with 12 enrolled and 2 declining the offer (2/14, 14%). No contact could be made with 5 and a further 6 were not contacted because the group was full. In site 2, of the 22 names, 2 miscarried, 17 were visited to ask about enrolment of which 11 agreed and 6 refused (6/17, 35%) and the nurses were unable to locate the remaining three clients. Thus, the overall the majority of those referred were eligible take-up for those contacted and eligible was 23/31, 74%, slightly lower than that found for home-based FNP (87%, Barnes et al., 2008).

*b) Characteristics of referred clients*

Their mean age of referred clients was 21.8 with a range from 18 to 25. Clients referred in site 1 were on average significantly older than those in site 2 (see Table 2.1;  $t=2.74$ ,  $p=.01$ ). The mean age of enrolled clients (N=23) was the same as those referred (21.8, range 19 to 25). While maternal age data were not available for all those who refused the offer of being in the group or were not contactable, it does not appear that the client's age was relevant to acceptance (see Table 2.1).

**Table 2.1 Mean maternal age in relation to disposition (N in brackets)**

	Accepted	Refused	Unable to locate	Group full	Medical reason	Total
Site 1	22.7 (12)	22.0 (2)	21.6 (5)	23.0 (6)	-	22.5 (25)
Site 2	20.8 (11)	20.2 (6)	22.3 (3)	-	22.5 (2)	21.0 (22)
<b>Total</b>	<b>21.8 (23)</b>	<b>20.7 (8)</b>	<b>21.9 (8)</b>	<b>23.0 (6)</b>	<b>22.5 (2)</b>	<b>21.8 (47)</b>

Gestation was ideally to be less than 12 weeks and not varying more than 4 weeks among group members but this was not feasible in practice in this pilot, although more successful in site 1 (a more densely populated area) than site 2 (see Table 2.2). Only 7 of 23 enrolled clients (30%) were less than 12 weeks pregnant with a mean gestation of 14.0 (site 1 13.3, site 2 14.7). In addition the range was from 6 to 23 weeks, greater in site 2 (6 to 23 weeks) than in site 1 (10-19 weeks).

**Table 2.2 Range in gestation (weeks) for enrolled clients**

N	<10	10/11	12/13	14/15	16-19	20+	Total
Site 1	0	4	3	3	2	0	12
Site 2	1	2	3	0	3	2	11
<b>Total (%)</b>	<b>1 (4)</b>	<b>6 (26)</b>	<b>6 (26)</b>	<b>3 (13)</b>	<b>5 (22)</b>	<b>2 (9)</b>	<b>23</b>

Eight mothers-to-be had given birth before, including two aged under 20. None was the biological mother of more than one child (see Table 2.3).

**Table 2.3 Previous pregnancies and births of enrolled clients**

	Pregnant Before	No previous pregnancy	Given birth	No previous birth
Site 1	6 (50)	6 (50)	5 (42)	7 (58)
Site 2	5 (45)	6 (55)	3 (27)	8 (73)
<b>Total</b>	<b>11 (48)</b>	<b>12 (52)</b>	<b>8 (35)</b>	<b>15 (65)</b>

Education and employment information was not consistently recorded on recruitment visit forms so this information is derived from the 19 interviews. However, it is useful



to consider since it either may be used as an additional criterion in the future. Only 3 (16%) had no educational qualifications and more than two thirds (13, 68%) had qualifications beyond GCSE level. While only 22% of regular FNP clients were working at the time of recruitment and 56% had ever worked (Barnes et al., 2008) the only gFNP client who had never worked was in full time education, with 7 (37%) working at the time of recruitment and two in higher education.

Clients also described their household composition during interviews. More than half (10/19, 53%) lived with a partner (8) or husband (2). This compares to a lower proportion overall (34%) who lived with their partner or husband in the wave 1 sample of mothers who received home-based FNP. Of the remainder, four lived with their extended families (ranging from four to ten people in the household.) and two were living as a single parent.

### *c) Reflections on the recruitment pathway and processes*

The nurse interviews provided insight into the effectiveness of the recruitment process, in particular comparing it to their experiences of recruiting from home-based FNP, for which it was only necessary to know the potential clients age and whether she was a first-time mother, with the aim of recruiting by about 16 weeks gestation but with lee-way to recruit at any time up to 28 weeks. For gFNP due dates were more crucial, needing to be both earlier and close to those of other referred clients. All reported that due dates were available and accurate but there was some missing information such as whether the client had been pregnant before and if so the number of children she may have.

In comparison to recruiting for 'regular' FNP, there is real time pressure so that group members can be recruited prior to 12 weeks gestation and also a sufficient number need to have their due dates in close proximity. When asked during interviews about the recruitment process time constraints were said to have been a problem in one site where contacting midwives was difficult.

*'We needed to clarify information with the midwife, we don't know how many children they have...midwives are on annual leave and of course you are coming up to Christmas break.... very, very difficult.'*

It became clear that the recruitment process had been more straightforward in one site than in the other, associated in part with previous working relationships between local community midwives and the FNP midwife running gFNP. In this location it was possible for the FNP nurses themselves to searching through midwifery records for possible recruits rather than leaving it to the community midwives.

*'We had plenty of referrals. It was a personal relationship really and they trusted us with their caseloads they almost didn't need to give us referrals really.'*

In the other site it was not the midwives in the main who were blocking referrals but a middle manager who refused to let the midwives refer clients to FNP.

*'He was obstructive to us, when time is of the essence; a week makes a difference, even a couple of days makes a difference.'*

When finding it a challenge to recruit a sufficient number of participants any change in the eligibility criteria was avoided but one strategy was to expand the geographical area within which potential group members were expected to live so that they could easily reach the children's centre where the group was to take place.

*'It is not that there weren't enough women giving birth but that there weren't enough women who wish to participate in the original area. We have expanded the area.'*

In addition, the gestation requirement was also made more flexible to allow more mothers to be considered eligible:

*'We did change it slightly; it was whether they were over 12 weeks (pregnant)'*

When asked in their interviews to compare with recruiting for home-based FNP FNs reported that it was more challenging, in part due to the nature of the potential client group, older, with more education and more responsibilities, thus less accessible:

*'I found it a lot harder, I think with the present climate of unemployment the younger girls tend to be at home more. They (gFNP referrals) have greater responsibilities themselves ...greater restraints on their time.'*

After completing the recruitment visit form FNs were asked to complete rating scales (1 to 5) to indicate how the potential client had responded to the idea of receiving additional support and how they had responded to the idea of being in a group. In site 1 all but one were rated as 5 (very pleased) at the offer of additional support with ratings more spread in site 2. Between two thirds and three quarters were rated as responding positively to the idea of being in a group with some in both sites thought to be neutral about being in a group; however no-one was said to have responded negatively (see Table 2.4).

Of the 23 clients enrolled, 15 (65%) were predicted at enrolment as likely to be good group members, able to speak with confidence and also listen to others, three (13%) were thought to be probably quiet at first, three (13%) were expected to be quite vocal but possibly would have difficulty listening to the opinions of others, and FNs were not able to predict what group behaviour would be like for the remaining two, one of whom was unwell during the recruitment visit.

**Table 2.4 FN ratings of clients after enrolment visits (percentages in brackets)**

	<b>1 Negative</b>	<b>2</b>	<b>3 Neutral</b>	<b>4</b>	<b>5 Positive</b>
Site 1, Idea of support	1 (8)	0	0	0	11 (92)
Site 2, Idea of support	0	0	2 (18)	2 (18)	7 (64)
Site 1, Being in a group	0	0	3 (25)	0	9 (75)
Site 2, Being in a group	0	0	2 (18)	2 (18)	7 (64)

Client interviews provided additional information about recruitment. They correctly recalled being told that gFNP was for first time or 2<sup>nd</sup> time mothers, that the programme continues throughout pregnancy until the child was one, that it was more than a traditional antenatal group and that it involved sharing problems in a group. Some mothers mentioned that they knew they had been referred by their midwife.

*'It is like a step by step to your pregnancy' (C7)*

*'It is not an ordinary antenatal group it is much different and that is what I like about it' (C3)*

They mentioned being aware that they had to be under 25 to be part of the group, that their due dates were similar to other mothers in the group and that a similar programme was offered locally to teenage mothers. Many remembered being told that it would involve taking their own blood pressure and testing urine samples and

would increase their contact with their midwife and health visitor. Some recalled being unsure if they would find time to be able to attend consistently and others mentioned that they had initial doubts as to whether they would do well in a group with other mothers:

*'I said I would have to check with work for time off' (C8)*

*'I wasn't sure I would stick with the group' (C2)*

*'I was a bit unsure at first because I am not a people person' (C4)*

## **2.3 Conclusions**

The selection criteria for gFNP were workable. The main challenges were to identify a sufficient number with due dates within 4-6 weeks of each other and to identify women soon enough in their pregnancies. Very few in either location had gestations of less than 12 weeks and was possibly too ambitious a target. Preparatory work with community midwifery might help to alleviate these difficulties but there remains the issue of making home visits to potential group members quickly, which may not be easy if many are in employment or education.

The nurses found that they were able to determine eligibility with ease in most of the home visits, and the clients did not feel that they had been targeted in a way that was stigmatizing. In the second site more difficulties were indicated with recruitment and it was more stressful for the nurses, possibly due to the difficulty in making up a sufficient number so they felt more pressure to get clients to agree to the offer. This may have backfired in that fewer accepted. Most who agreed to the programme were said to respond well to the offer and nurses' expectations at enrolment were that the majority would be 'good' group members, able to engage in discussions.

The clients recruited were by design different from clients receiving the home-based FNP programme, also being offered in each location. The gFNP clients were on average older, with more qualifications, more likely to have been employed and in higher status work and more were living with their partner. To reach a more vulnerable population it is likely that additional criteria beyond age, location near the children's centre and gestation.

## Chapter 3. Programme delivery

In this chapter the following questions are addressed:

- How effectively can group FNP be delivered, in pregnancy and in infancy?
- In infancy what is the impact of the presence of babies in the room on delivery?

### 3.1 Extent of exposure to the programme

#### *a) By group session*

First delivery is looked at in terms of attendance per group. Based on the UKG001 forms submitted, attendance in pregnancy was on average 74% per meeting in site 1 (109/147, range 40% to 90%) and 78% in site 2 (111/143, range 60% to 90%). The mean number of clients attending in site 1 during pregnancy (out of 12, with one client not attending any sessions) was 7.8 per group (range 4 to 9). The mean number attending in site 2 (out of 11) was also 7.8 (range 5 to 10). Delivery in infancy was slightly lower with attendance overall at 70% in site 1 (193/274, range 33% to 100%) and 59% in site 2 (137/234, range 29% to 86%). In infancy there were 10 remaining clients in both site 1 and site 2 and the average number attending was 6.7 while in site 2 it was 5.3.

Site 1 had no clear pattern of a decline in attendance later in infancy, after 6 months, but in Site 2 there was a drop in attendance from that point in time. This was in part due to the fact that several in this group had started to return to work and their attendance became more sporadic from that time onwards, but they had been kept as enrolled clients since they expressed a wish to try to attend if they could, taking the day as leave, or when their shift patterns allowed it

#### *b) By client*

One can also look at delivery per client, so that receipt of the programme can be compared with recommendations for home-based FNP (see Barnes et al. 2011 for details). In site 1 no forms were submitted for one of the 12 clients, who never attended any sessions. Of the remaining 11 clients, the average number of pregnancy sessions attended was 9.9 (range 1 to 13) representing 71% of the 14 pregnancy sessions (range 7% to 93%). Almost half (5) had personal exposure to the programme above 80%, which is the recommendation for home-based FNP. In site 2 the average number of pregnancy sessions attended was 10.9 (range 4 to 14) representing 78% and 6 of the 11 clients were above 80% (range 29% to 100%).

Data were available for 29 of the 30 infancy sessions in site 1 for the 10 clients who attended any infancy sessions (2 had left during pregnancy). The average number attended was 19.4 (range 2 to 29), representing on average 67% of sessions (range 15% to 100%). For home-based FNP it is desirable for clients to receive at least 65% of infancy visits. Thus gFNP clients have on average a dosage which is greater than this recommended level, and 6 of the 10 had delivery levels greater than 65% (range 69% to 100%). Data were available for 26 of the 30 infancy sessions in site 2 for the 10 clients who attended any infancy meetings (1 had left in pregnancy). The average number of the 26 sessions attended was 13.7 (range 1 to 23) representing

on average 53% of the sessions (range 6% to 96%). Four had personal delivery levels greater than 65% (range 69% to 96%). Given that they might have found it more of a challenge to attend once their infant was born, especially if they had a Caesarean section, the early infancy interviews covered reasons for non-attendance. Generally, the mothers have found attendance relatively easy and they looked forward to the group.

*'I have been five times since birth.'* (C7)

*'I have missed one day and that was the day I had her.'* (C15)

The main reasons for non-attendance were if clients or their child was ill or if they had experienced a particularly bad night sleeping with their new baby.

*'Yes, I missed one when my baby was ill he had a cold in his eye. He was really mardy and I was tired from being up all night.'* (C2)

### 3.2 Attrition

One measure of a successfully delivered programme is that there is low attrition, suggesting that clients continue to be engaged and to be learning from their participation. Overall the attrition has been modest and, despite the small numbers involved, has been in accordance with the expected rate of attrition that is indicated for home-based FNP (see Table 3.1)

**Table 3.1 Rates of attrition by phase of the programme and by site (percentages in brackets)**

	<b>Pregnancy</b>	<b>Early infancy</b>	<b>Late infancy</b>	<b>Total</b>
Recommended maximum % (Individual FNP)	10%	10%	10%	30%
Site 1 (N=12)	2 (17)	1 (8)	0	3 (25)
Site 2 (N=11)	1 (9)	0	3 (27)	4 (36)
<b>Total (N=23)</b>	<b>3 (13)</b>	<b>1 (4)</b>	<b>3 (13)</b>	<b>7 (30)</b>

The reasons for leaving in pregnancy were not clear since it was not possible for the teams to make contact to find out why the 3 'no-show' clients had decided not to attend. Presumably after agreeing to take part they simply changed their mind. Of the four leaving during infancy, the majority did so after their infant was 6 months old. The only departure in early infancy was one client who moved out of the area (and the country). Of the three who left later on in infancy, two became involved either in full-time education or employment so were no longer able to attend the meetings and one (with complex mental health needs) was receiving services from another agency and had many other meetings to attend.

*'I stopped going about four or five weeks ago ...going to work full time is great, I am loving it more than I thought.'* (C12)

*'The rest was just times when I had other plans really and I needed to see other people so I couldn't make it'* (C8)

### 3.3 Content covered

One aspect of fidelity of delivery is the extent to which the sessions cover the content of the programme in the way that was intended. Since this is a new adaptation of FNP, the guidelines for the content of home-based FNP are used as a benchmark, but these may change over time as gFNP curriculum becomes finalised. The

coverage of the five content domains varied slightly between the two sites in both pregnancy (see Table 3.2) and infancy (see Table 3.3). Relative to the US recommendations, in pregnancy site 1 spent less time on Personal Health, with more on Family and Friends and the mother's Life Course plans. In infancy the percent of time on Personal Health was at the upper end of the recommended range in both sites, and the average time on Life course at the lower end of the recommended range in both. However, with respect to Maternal Role, Family and Friends and Environmental Health, while the overall average for each of these domains was close to the recommended proportion of time, based on individual FNP, Site 1 spent relatively less time on the Maternal Role and more on both Family and Friends and Environmental Health; the opposite was the case for site 2.

**Table 3.2 Average content of pregnancy group sessions by site (percentages)**

Recommended %	35-40%	23-25%	10-15%	10-15%	5-7%		
Site	N sessions	Personal health	Maternal role	Life course	Family and friends	Environmental health	% of planned content
1	14	33.9	32.7	11.7	13.6	8.1	96.5
2	17	43.1	29.3	8.0	9.7	9.3	90.7
<b>Total</b>	<b>31</b>	<b>39.0</b>	<b>30.8</b>	<b>9.7</b>	<b>11.4</b>	<b>8.8</b>	<b>93.3</b>

**Table 3.3 Average content of infancy group sessions by site (percentages)**

Recommended %	14-20%	45-50%	10-15%	10-15%	7-10%		
Site	N sessions	Personal health	Maternal role	Life course	Family and friends	Environmental health	% of planned content
1	29	20.5	39.1	10.0	14.1	16.0	92.4
2	26	19.6	49.0	9.4	11.5	10.3	93.3
<b>Total</b>	<b>55</b>	<b>20.1</b>	<b>43.8</b>	<b>9.7</b>	<b>12.9</b>	<b>13.3</b>	<b>92.8</b>

During pregnancy home visits or one-to-one meetings had, not surprisingly, been primarily focussed on the mother's health (57%) or the maternal role (30%; see Table 3.4). In infancy the content was closer to the group sessions (see Table 3.5) but again with a substantial amount of the time focussed on the mother's health, though with some site variation. In both areas the maternal role was again one of the main topics and (in accord with the pregnancy home visits) it was unlikely in either site that the mother's life course would be discussed in these (additional) home visits. Infancy home visits or one-to-one sessions in site 1 were less likely to focus on the mother's health than in site 2, and were more likely to focus on environmental health.

**Table 3.4 Average content coverage of pregnancy home visits or one-to-one meetings (percentages)**

Recommended %	35-40%	23-25%	10-15%	10-15%	5-7%		
Site	N visits	Personal health	Maternal role	Life course	Family and friends	Environmental health	% of planned content
1	33	62.7	25.5	1.1	5.8	5.0	100
2	27	50.2	35.6	1.9	8.0	4.4	100
<b>Total</b>	<b>60</b>	<b>57.1</b>	<b>30.0</b>	<b>1.4</b>	<b>6.8</b>	<b>4.8</b>	<b>100</b>

**Table 3.5 Average content coverage of infancy home visits or one-to-one meetings (percentages)**

Recommended %		14-20%	45-50%	10-15%	10-15%	7-10%	
Site	N visits	Personal health	Maternal role	Life course	Family and friends	Environmental health	% of planned content
1	19	29.7	40.5	3.7	13.4	12.6	99.5
2	10	42.5	39.0	1.5	10.5	6.5	100
<b>Total</b>	<b>55</b>	<b>34.1</b>	<b>40.0</b>	<b>2.9</b>	<b>12.4</b>	<b>10.5</b>	<b>99.7</b>

### 3.4 Quantitative judgements of client behaviour

After each group meeting a form is completed for each client who attended with ratings (1 to 5) for their understanding of the content, their involvement, and any evident disagreement or conflict with the materials presented. During pregnancy the average for both involvement and understanding was close to the maximum (see Table 3.6). In one site all clients were rated as 5 for both domains after every session. In the other site ratings ranged from 3 to 5 for involvement and 2 to 5 for understanding, although the majority were rated as 5. Virtually no conflict was noted with the materials being presented, with ratings of 1 (no conflict) for every session for all but two clients. Ratings were similarly high during infancy. There was slightly more variability in the FN's ratings of whether clients had completed written work either during the meeting or homework given out in the previous session (see Table 3.7). There was no observable reduction in homework completion in infancy, when mothers might be expected to have more of their time taken up with infant care. In fact the reverse is the case for home-work, more was completed.

**Table 3.6 Average FN ratings of clients' behaviour during group sessions using scales from 1 (low) to 5 (high) (range in brackets where appropriate)**

Site & phase	Involvement	Understanding of materials	Conflict with materials
1 pregnancy	5.0 (4-5)	5.0	1.0
2 pregnancy	4.8 (2-5)	4.9 (1-5)	1.0 (1-2)
<b>Total pregnancy</b>	<b>4.9 (2-5)</b>	<b>4.9 (1-5)</b>	<b>1.0 (1-2)</b>
1 infancy	5.0	5.0	1.0
2 infancy	4.8 (3-5)	5.0 (2-5)	1.1 (1-3)
<b>Total infancy</b>	<b>4.9 (3-5)</b>	<b>5.0 (2-5)</b>	<b>1.0 (1-3)</b>

**Table 3.7 Average FN ratings of clients' completion of written work using scales from 1 (not done) to 3 (completed) (range in brackets)**

Site & phase	Completion of written work	Completion of home-work from previous session
1 pregnancy	3.0 (1-3)	2.0 (1-3)
2 pregnancy	2.9 (1-3)	1.3 (1-3)
<b>Total pregnancy</b>	<b>2.9 (1-3)</b>	<b>1.6 (1-3)</b>
1 infancy	2.9 (1-3)	3.0 (1-3)
2 infancy	1.9 (1-3)	2.9 (1-3)
<b>Total infancy</b>	<b>2.6 (1-3)</b>	<b>3.0 (1-3)</b>

Table 3.8 shows mean ratings about the group in general, rather than specific clients, made by the nurses on session feedback forms. The average level of interest is slightly lower in infancy, in all likelihood affected by the fact that mothers may be occupied with their infants during group time in infancy. However, the level of engagement with the programme remains, according to the FNs, very high.

**Table 3.8 Average scores for the groups' interest and level of listening**

<b>Question</b>	<b>Pregnancy N=40</b>	<b>Infancy N=98</b>
How interested do you think participants were in this session? (1= not at all, 10 = very interested)	9.6 (range 8 – 10)	9.0 (range 6 – 10)
Did you feel the group listened to what you had to say? (1 = not at all, 10 = listened really well)	9.2 (range 8 – 10)	9.1 (range 7 – 9)

### 3.5 Conclusions

Delivery of the programme has been good with the majority of clients retained and attending to the end of the programme, demonstrated both by the average number attending each week, the average number of attendances per client, and the relatively low level of attrition. The main difficulties with attendance were for clients who were returning to employment or to education. In one site there were no leavers at all in late infancy while the other group had more clients returning to employment or education. It has already been decided that the inclusion criteria for future groups will be more restrictive so that mothers with educational qualifications at or above the level of GCSE at A\* to C will not be enrolled. This is likely to mean that attrition can be kept to a minimum.

FNs made every effort to keep in contact with clients who had difficulty attending later in infancy though this meant that, while attrition was kept lower exposure or 'dosage' would be lower; they were reluctant to submit a 'leaver' form and the clients themselves were reluctant to be considered leavers. When the group is recruited they have a common expected delivery date and, unlike individual FNP, considering a client a leaver if attendance is poor or non-existent will not mean that a new client can be taken onto the programme. Thus it is sensible for the FNs to keep clients unless they are clearly not going to return (e.g., they move out of the country).

The content of the group sessions has reflected very closely the stretch objectives developed in the USA for individual FNP. Involvement and understanding of clients and of the overall group were consistently rated by FNs to be high, and written work was generally completed. Interest was marginally lower in infancy compared to pregnancy, probably related to the fact that in the group mothers needed at times to attend to their infants. If home visits or one-to-one sessions were requested they generally focussed on maternal health or the maternal role. While providing additional effort for the FNs it is likely that the offer of home visits helped to limit attrition, especially during pregnancy.



## Chapter 4. Acceptability of the programme to clients

This chapter addresses the following questions:

- Is gFNP acceptable to service-users?
- What are clients' expectations of nurses and are they realistic?
- Which elements of the programme engage service-users, and what factors influence their retention in the programme?

### 4.1 Structured feedback

The clients were asked to fill (anonymous) feedback form at the end of each session. The rating scale used was 1 to 5 in pregnancy and (with fewer questions) 1 to 10 in infancy. The results are shown below in Tables 4.1 and 4.2; virtually all the ratings received in both pregnancy and infancy indicated that they found the group very interesting and that the nurses had responded to what they themselves had to say.

**Table 4.1 Mean ratings made by clients after pregnancy sessions, using 5 point scales**

Site	How interesting	Nurses listened	Said what wanted	Felt comfortable
1 N=116	4.9 (4-5)	5.0 (4-5)	4.9 (3-5)	4.9 (3-5)
2 N=77	4.9(2-5)	5.0 (4-5)	5.0 (4-5)	4.9 (4-5)
<b>Total N=193</b>	<b>4.9 (4-5)</b>	<b>5.0 (4-5)</b>	<b>4.9 (3-5)</b>	<b>4.9 (4-5)</b>

**Table 4.2 Mean ratings made by clients after infancy sessions, using 10 point scales**

Site	How interesting	Nurses responded	Felt involved today
1 N=181	10.0 (8-10)	10.0 (8 -10)	9.8 (5-10)
2 N=114	9.9 (7-10)	9.1 (9 - 10)	9.9 (7-10)
<b>Total N=295</b>	<b>9.9 (7- 10)</b>	<b>9.5 (9 - 10)</b>	<b>9.9 (5-10)</b>

While the feedback forms were completed anonymously clients might have felt some pressure to make positive ratings since the sheets are handed to the FNs, and may be influenced by other group members. In each of the interviews clients were asked to rate, on scales from 1 to 10, the FNs, the programme materials, and to judge how much difference they thought gFNP had made to their pregnancy or (in infancy) to their parenting. In this one-to-one setting they may have felt more freedom to express any negative opinions but again the ratings were on average very high (see Table 4.3) with negative ratings mainly restricted to the materials although the average was above 8.

The lower ratings when asked what difference the group had made were primarily from the group members had already had one baby and felt that they would have managed, though not as well or those with very good support from their family.

*'I would say it is really useful even if it is your second baby as there are things like you think you know it all but when you get to the group they show you things and you think actually I didn't know that.'* (C2)

*'I would say 8 because of having a baby already, but if it was my first I would rate it 10 because it is very easy to understand.'* (C5)

*'I probably would have coped without it as I have a strong sense of friends and family network so it is not like I wouldn't have coped. But it has made a difference once a fortnight being able to plan my week around it. It has made a positive difference.'* (C12)

**Table 4.3 Mean ratings made by clients in research interviews, using 10 point scales**

<b>Question</b>	<b>Pregnancy (N=19)</b>	<b>Early infancy (N = 18)</b>	<b>Late infancy (N = 14)</b>
<b>The FNs</b> 1= not really made much difference 10 = fantastic, I don't know how I would cope without them, they are so understanding and helpful	8.9 (5 - 10)	9.5 (7-10)	8.7 (5 – 10)
<b>The materials</b> 1 = not useful, poorly presented 10 = fantastic, really understandable and has taught me a lot about my pregnancy and how to cope	8.9 (6 - 10)	9.1 (7 – 10)	8.2 (4 – 10)
<b>The difference the group has made</b> 1 = not at all, not learnt anything new and have lots of other support anyway 10 = made all the difference in the world, before being offered FNP was not sure how I would cope	8.6 (5 - 10)	8.6 (5 – 10)	9.0 (5-10)

#### **4.2 Qualitative interviews, relationships with FNs**

Group FNP nurses were perceived from the outset as providing a different kind of interaction from the 'normal' antenatal care professionals that mothers would ordinarily see; they were said to be more therapeutic and less judgemental. This should enhance their engagement in the programme:

*'It is like counselling in a sense you know they are going to help you out'* (C5)

*'They don't talk down to you. They know a lot more; they don't make you feel silly with any questions'* (C14)

The mothers continued to have good relationships with the FNs into infancy. Some described how they saw them as friends even though they also recognised they had a professional role. Not surprisingly a number of clients seemed to be talking more to the health visitor FN after their infant's birth whereas in pregnancy many of them had talked about their close relationship with the midwife FN.

*'I am going to (FN) as she is the health visitor so I have become close to her now so it has changed.'* (C11)

*'I love both of them. I feel like I have known them forever... I can talk to her about anything. I think the world of both of them.'* (C1)

*'There is a variety of things they can offer you but the biggest thing they can give you is support.'* (C13)

One concern was that clients were expecting FNs to return texts and messages during evenings, weekends and even in one case when a nurse was on holiday. Although clients really appreciated this 24 hour service it may be putting undue pressure on the nurses to be available at all times and creating an unrealistic expectation.

The mothers and FNs relationship throughout the group has been very strong. Mothers reported in the late infancy interview that they trusted the nurses indicating there have been no change in the latter stages of the project. Mothers who have returned to work still reported that they have some texts and communication with the FNs and that they felt able to call them and ask questions if necessary.

*'It is brilliant, it is like having two extra Mums that you can go to and talk to and go "Something has happened; what do I do?"'* (C11)

*'I think I can trust them quite well and be open around them, I have got a good trust there that I probably didn't have at the beginning. I would say I see them as much as a friend as professionals.'* (C10)

*'They are brilliant, dead friendly and you know you can always count on them any time and not just at the group.'* (C13)

#### **4.3 Qualitative interviews, relationships with other group members**

The mothers had positive feedback about the pregnancy sessions and liked the fact that the programme brought them into contact with other mothers due to give birth at about the same time.

*'It introduces me to the mothers and a lot more insight'* (C14)

*'I liked the fact that we all knew we were going through the same stages at the same time'* (C13)

The group has enabled some to meet new friends, some noting in their interviews that they had no friends who had babies or were pregnant and others were new to the area and did not have many local friends.

*'I have formed some really good relationships. I don't think anyone is dominant'* (C5)

*'I would like to see some of them in the future'.* (C3)

*'I don't have anyone in my normal group of friends who is pregnant, so they are not really interested in talking about it.'* (C2)

While they liked the group context, some also appreciated the fact that some time was spent in small groups or pairs. They found that taking part in the small group work meant they could have more conversations with the group members they may not have talked to yet.

*'I think it is better in twos, as you are talking to each other and then you can talk to the group together.'*(C18)

*'The group members get to say what they want more in the small group'* (C13)

In Infancy they noted improvements in the way that the group involved themselves in the discussions:

*'We talk a lot more than when we first started going to the group there was a lot of silence and nobody really said anything but now we talk all the time.'* (C5)

In pregnancy some clients identified certain group members as taking up too much time discussing their problems this no longer seems to be occurring, partly due to the FNs' intervention to reduce this tendency and partly because stronger bonds had developed between the group members, so they did not mind so much if one member spent time on an issue that was specific to her.

*'It is better now one girl spoke a lot I think they do a bit more now they sort of say 'Oh shall we move on.'* (C8)

The clients' relationships progressed throughout the programme. Many reported seeing each other outside the group although this was sometimes less easy to organise now that some mothers were returning to work. A few admitted they found it hard to make friends but had been able to make at least one good friend in the group.

*'I find it hard to make friends but she is the one in group that has made me feel comfortable.'* (C4)

*'I am closer with more of them than I was before.'* (C6)

*'We talk on Facebook or text.'* (C7)

*'I have the best friendship I have in my town because I came here not knowing anyone.'* (C12)

*'I have made on proper friend from it and I am going out with her for my birthday.'* (C14)

Once infancy sessions began the presence of other mothers and other babies was a considerable draw. They could look at how behaviour such as fussiness were handled and can also display their own parenting skills and their baby's prowess.

*'Yes he wants to stretch out and have a wriggle, whereas most babies are asleep so I sit on the mat with him.'* (C1)

*'I love it. I love showing off with her I don't know why. I love taking my buggy.'* (C14)

Mothers were asked to comment on anything unhelpful occurring in the group dynamics such as some clients taking up too much attention or competitiveness. This does not seem to have occurred in later infancy which contrasts to the infancy stage where some mothers were reported to take up more of the FN's time.

*'Some days someone might have a problem they need to talk about it is not like one person always has the attention.'* (C1)

*'They do make sure I am kept under check a little bit, they do make sure everyone is allowed their say.'* (C6)

*'There is nothing competitive about it and all babies develop in their own way and we all know that.'* (C9)

*'It used to be like that but no it is more interesting than competitive when we were first there in the first few months it was competitive.'* (C14)

#### 4.4 Perceptions of the materials and programme content

After each infancy session an item was added to the anonymous feedback sheets so that clients could list any activities that they particularly like that week. The most commonly mentioned are given in Table 4.4. The craft activities in particular were valued and a variety of activities pertaining to feeding and weaning. In addition the mothers enjoyed the way that they could watch the children play and learn about developmental progress and ways to encourage them through play.

**Table 4.4 What was the best thing in the group today?**

Learning about feeding, nutrition and weaning
Crafts; making cards with baby footprints
Crafts: making hearts, Christmas decorations, boxes
Singing and music
Baby massage
Talking to other mothers
Budgeting
Job Centre plus visitor
Learning stages of development
Talking about difficulties and common problems
Outside play
Tests on babies, sensory items e.g. food tasting
Discussing food and menus
Watch babies play together
Crafts: making scrap books
Floor play with children/learning how to play

The clients were also asked in their interviews to recall activities that they likes and many commented from early on in the programme that they were learning in an enjoyable and constructive manner:

*'I go in thinking I know it all and come away and I learnt lots' (C6)*

*'I am at home and not working no more; I am at home and need it. I look forward to it' (C5)*

When asked to recall the subject matter clients praised the rate at which the information was covered, which was at a more leisurely pace that they might have encountered in a routine antenatal health check. This was evident to those who had already given birth:

*'I found she didn't overload you with lots of information which I felt that had happened before.'* (C17)

They like the fact that messages were conveyed in creative ways that encouraged physical activity. For instance the energy bucket exercise to illustrate how much emotional energy mothers were using:

*'How empty is your bucket, you had a cup and you had to take out the amount of popcorn to say how much you were giving away' (C4)*

*'There were lots of physical activities we had to stand up and walk around and move things around' (C15)*

In early infancy, soon after the birth of their babies, they recalled and had used the materials on feeding and weaning. They appreciated practical advice and the baby massage technique was mentioned by several, seen as a very positive way to soothe infants and also a way to bond.

*'It was probably feeding; I am probably the last one to get my baby into a feeding routine as-well as one of the other girls.'* (C18)

*'They showed us how to give the baby a bath... if you didn't have things ready by the bath like a towel, then you are left with a baby in the bath.'* (C9)

*'The baby massage was good because it relaxes her.'* (C15)

Other mothers recalled as favorites learning about infant communication, which had enabled them to understand what their baby needed or wanted.

*'The symbols the babies do like their hands are open, they like it and enjoy it but if they are closed and they have fists, they are not enjoying what they are doing.'* (C12)

In later infancy interviews many remarked on how useful the discussions about weaning had been noting that, despite the range of views held by group members, the topic had been covered in a way that was not judgemental, but was imaginative and also helpful. For instance taste testing gave them a 'baby's eye view of what it is like to be offered unfamiliar foods:

*"We did test testing, we had to be blindfolded and someone had to guide us to put the food in our mouth, we didn't know what it was. It shows what the babies think because they don't know what it is, I had never thought about it like that; we know what we like but they don't know."* (C2)

Advice on portion sizes when offering solid food and letting the baby decide how much to eat was also useful, and particularly important given that many had been giving portions that were larger than recommended by the FNs.

*"We did portion sizes and jars; I think I was feeding her a bit too much"* (C3)

Others had been encouraged that, even if teeth were not yet through, some chewable foods could be offered:

*'I was still giving her jars because she didn't have any teeth....I said "can she have orange?" and they said she could so I am giving her more of our food now, she likes chicken and fish.'* (C7)

The sessions on communication and how babies develop were praised; their remarks reflected that there had been behaviour change on their part following the group:

*"I love learning about how the baby develops, it's stuff I really didn't have a clue about when I had my first."* (C6).

*'Last week we were doing communication with children ... slowing down and repeating words.'* (C5)

*It has been really good just talking about the different ways you can encourage them.... like giving her mats to lie on to encourage her to crawl.... and how to play, I have been making sure that for an hour or two I am just sitting on the floor playing with her.'* (C10)

*'Talking about how the brain connects and how they learn things and how you have to repeat things and I have started doing more songs, I was going from one to another but now I stick to one.'* (C9)

Craft activities allowed the mothers to become involved in an enjoyable experience which would provide them with long-lasting memories in the form of scrap books or pictures.

*'They brought pens and things, we sat there to do our scrapbooks, it will be something to keep, and we wrote down all the things we had learnt in the group, it's something I can show my baby when she is older.'* (C12)

Many clients reported in their pregnancy interviews they had not done any of the checks; they like the idea of doing it but in practice at that stage they preferred the midwife to do them.

*'I would like to have a go (measuring fetal heart rate) but I would be worried if I didn't find anything'* (C11)

*'I haven't had the guts to try it.'* (C13)

*'It is nice to know I don't need to wait. I can sort it out myself and I don't need to wait on anyone.'* (C6)

#### **4.5 Conclusions**

Their comments and ratings show that a number of mothers felt they needed the group while others were influenced by it and enjoyed the company of the nurses and other mums. The relationships between nurses and mothers and among the mothers themselves seem to be positive and supportive at this stage. The group dynamics are working well with no competitiveness. The mothers seemed more accepting of each other and their different lifestyles compared to their first interviews in pregnancy. Overall, the group has bonded well and felt cohesive and accepting which undoubtedly encouraged them to continue attending until their child reached one year old.

## Chapter 5. Acceptability of the programme to Family Nurses

This chapter addresses the following questions:

- Is gFNP acceptable to practitioners?
- What skills do practitioners need to deliver the model successfully?

### 5.1 The group context

Having been involved up to that time in delivering FNP as a home-based one-to-one programme FNs were asked about the difference, covering the same kind of content in a group. One particular issue was the extent to which all group members would participate.

During the pregnancy interviews the nurses and supervisors reflected on the first few groups. On the whole they considered that some of the clients had become involved in the group process easily, as they had predicted when recruiting them:

*'With the more talkative members it has been OK so far. We as the facilitators are setting the pace of the group. I think I do have a relationship with the girls but obviously it is taking longer, I feel as though they trust us.'*

They all agreed that it was important to have two facilitators to run the group. They had experienced running the group alone if their colleague was on annual leave or sick.

*'It always more difficult on your own because there is none of the usual banter between us. However there was still humour in the interactions between me and group members.'*

Some activities involve breaking out into smaller groups and this was particularly useful in the early stages of the programme, when clients were less confident. The nurses paired more and less confident mothers together in the break-out activities.

*'We kind of know who are more confident which then encourages everybody else to join in. when we put groups together we try and put more confident members with less confident members. Yes we do that with ice breakers (mixing them up) we have every session.'*

### 5.2 Attendance and attrition.

In pregnancy FNs were positive about attendance. They reported that it had been good, with the majority of participants giving them prior notice when they could not attend:

*'The attendance has been good there have been very genuine reasons if these girls can't attend'*

*'It has been around nine people at every group. The reasons (for not attending) have been genuine.'*

Some issues were evident when they were re-interviewed during infancy, when some clients were attending less regularly. The nurses reported that they took steps to challenge clients when they did not attend. They contacted them to ask why they



did not attend and in pregnancy a home visit was suggested, though this was less likely to be suggested in infancy thinking that this might indeed lead to more non-attendance.

*'The dilemma is always how long do you leave it before you go out and do a home visit and discuss the situation.'*

Nurses were asked to compare attrition for gFNP and the home-based programme. In general they felt that the rates of attrition were better for gFNP which they attributed to the support in the group encouraging clients to continue attending.

*'I think if I analyse it, I would say that they attend more or better than our 1:1'*

*'They have the group support it is possibly easier to keep them.'*

It was noted that the absence of some clients could make the group less attractive for those who did attend, another reason why group members may try to encourage each other to attend:

*'If they physically don't turn up as a group it can have an effect on the other people, so you end up with four people and it looks rubbish so they may not bother to come next time.'*

### **5.3 Perceptions of the materials and programme content**

From the outset they found that the materials (which were adapted from home-based FNP) had been successful. Being familiar with delivering FNP gave them confidence to use them flexibly in the group context.

*'What went really well was the change (topic); instead of being specific by saying it is about changing your relationship or changing drinking we did introduced it by saying 'all of us have thought about changing something like diet or whatever''*

They noted which parts of the content might need amending, in terms of the style of delivery:

*'Warning signs in pregnancy is a list and we went through it. We talked about the treatment and things and it got a bit boring'.*

They also remarked that the absolute amount of information conveyed was likely to differ from their experiences of home-based FNP and that it was more important to focus on encouraging discussion:

*'It is virtually impossible to give what we give to people on a one to one in a group because of the constraints of them wanting to discuss it'*

In line with comments from the clients, the PIPE craft activities and food tasting were the most frequently rated in session feedback sheets as have been successful together with other activities that stimulated child development, particularly those involving music. There were fewer activities that were seen to have not gone so well, but they appear to be related more to the maternal life course (e.g. budgeting) or health (postnatal exercises)

During interviews PIPE and other craft activities were praised for providing learning in an in-depth way rather than superficially, and incorporating movement so that more interaction would occur.

*'The PIPE we use has been good and the craft activities as the clients sit round the table and they have the babies on their laps or on the floor. A lot of talk occurs during craft time which has been very useful; it is relaxed and more natural and less structured.'*

Some mentioned that topics that highlighted differences between group members, either in their beliefs or their situation, could be a challenge:

*'Weaning has been quite controversial at times; budgeting too as half the group work and half are on benefits, there was this political overtone at one point in the discussion.'*

On several occasions outside experts had been brought into the group which appears to have worked well:

*'I think they enjoyed the outside stimulus people coming in. They had someone come in and do baby massage that went very well, and Job Centre Plus, about benefits'*

Overall the materials transferred well from home-based FNP to the group context, and had in some cases led to added value by the exposure of clients to different opinions or to witnessing different babies responding in a variety of ways.

Session feedback questionnaires also allowed FNs to note the strengths of that particular session and improvements that could be made for the future. Strengths of sessions often involved good team working between the two nurses and sessions when they were able to keep the timing of tasks to those planned. They also noted that using Motivational Interviewing strategies was successful in addition to the use of humour. For the future they wanted to become more familiar with all the materials but particularly PIPE, and they thought at times that group members would benefit from more time to express their feelings. It was noted that presenting the group alone was not successful and that outside speakers, while enjoyed by the clients, may need more preparation about how to share their information.

In pregnancy clients are encouraged to check their own blood pressure, urine samples and foetal heart checks. Although the nurses were teaching the clients to do the checks they were not reinforcing this initially, partly to make sure the information was collected and to avoid putting too much pressure on the mothers as they became used to the group.

*'The midwife FN sees clients before or after the group individually in the room. I think this may come up later when we are looking at things like weighing the babies and head circumferences and length and all the rest of it. It (clients doing the checks) is actually quite time consuming.'*

*'They (clients) are not really very bothered about doing it. But we haven't told people to listen to fetal heart yet because they were still quite early on in pregnancy.'*

#### **5.4 Skills and supervision**

The nurses identified their previous knowledge of the FNP material and running groups previously as being integral to their current work. They thought that as a team with their co-facilitator provided complementary skills. Knowing the other facilitator had complementary skills also seemed to boost the nurses' confidence running the groups.

*'I have an excellent colleague, she has strengths about running the group and I have strengths about delivering and being a midwife.'*

*'We are different personalities. I think [x] tends to deliver the emotional part of FNP talking about trust and relationships whereas I do more of the clinical side.'*

The organisational psychology consultant also highlighted the importance of therapeutic skills and listening and responding to clients concerns at any given time in the sessions.

*'If you just go with the curriculum you end up with a group running on a fairly superficial level. How is that FNP and not an antenatal class? That has some value in itself but you need motivational interviewing and to start transforming lives and the therapeutic aspect is very important.'*

The FNs did not receive formal training for running the groups but instead had discussions alongside the central team, supervisors and the psychology consultant to mutually agree the best strategy for approaching recruitment, planning and administering the sessions.

*'A lot of it has been experimental we have discussed how the groups have run through debate, I wouldn't necessarily say it was in terms of having formal training.'*

*'I think just getting together with the FNs from the other site and writing the guidance it gives us support and that has helped.'*

When asked about additional training they would like the nurses all unanimously identified Motivational Interviewing (MI) specifically for groups as the one piece of training they really wanted.

*'We asked for something around MI around the group setting. Someone says something if you are talking about behaviour change, in a group setting it would have a slightly different slant on it.'*

## **5.5 Workload issues, cost and infrastructure**

The nurses mentioned coming in to do the group while on annual leave because they felt it worked better with the two nurses who were familiar with each other. This may not be sustainable over a long period and in fact a more permanent stand in had been arranged in both sites.

The FNs also maintained home-based FNP caseloads, reduced to take into account the gFNP work and they reported sometimes finding it hard to find time for repeat visits with home-based mothers if they cancelled an appointment. They suggested that home-visits to gFNP clients should be limited, especially in infancy.

*'We need to be crystal clear in terms of boundaries (particularly about home-visits). As soon as you do those visits at home there is a bit more of an expectation from the clients of what you are going to do.....Are we their FN or do we just run the group? There is a real need to get that clear.'*

The nurses were asked if they found the group or regular FNP more enjoyable or stressful, the responses were mixed. Many found the group more rewarding but also more stressful.

*'They have a colleague they can bounce off ideas and they can decide how they are going to present a certain topic.'*

*'Sometimes other people in the house can look after babies .....I think they are just different and they complement each other and it is quite nice to be able to do the group, it is a change from doing 1:1.'*

The physical placement of the groups in Children's Centres had many advantages but it also led to complications for the FNs. Some nurses found carrying all the equipment around such as dolls, paperwork, drinks to venues and not being able to park at the children's centre was particularly demanding

*'You have to be highly organised because you can't just pop and go and get this or that, it was also the midwifery side, taking all the midwifery equipment as well as the juice and dolls and equipment and the notes. We were allowed in the car park to unload but then we had to move the car and then bring the cars back reload. It is all extra stress. It would be helpful to have a room.'*

The location of the groups in Children's Centres also presented other practical problems:

*'(Because several organisations were in the building) there was a code for the photocopier and they couldn't decide if we were Health or Children's Centre and by the time they decided which code we were we couldn't be bothered, those practical things make a difference.'*

## **5.6 Conclusions**

The start-up phase of this programme, as with many new projects, did not allow sufficient time to fully work out how best to present the materials. Adaptations were being developed while the pressure of recruitment was also ongoing. Nevertheless the FNs appear to be pleased with the delivery of the programme from the outset.

They all had experience of running groups and this was invaluable, but in the future they would value more training on how to integrate the Motivational Interviewing style of working into a group context. Not surprisingly they also indicated that they would like more time to think about the programme and how best to deliver the content.

They found the group FNP enjoyable and appreciated to chance to work closely with a colleague. Providing gFNP was a complement to their experiences delivering home-based FNP, but the group work was sometimes more stressful because of trying to provide some home-visits in addition to the group sessions, which could impact adversely on their work-load. Moving equipment back and forth from cars to buildings, parking and managing older noisier babies was difficult for the nurses

The FNs have seen progress in their groups which has been rewarding for them. They comment that the clients are engaging in the group and the therapeutic relationship has worked well. In comparison to individual FNP they appreciated the impact that could be made by conducting discussions about issues such as weaning in a group, and also the energy that was evident when craft activities or infant play was part of the session. Overall they appeared to find the group to be an effective way to share the FNP curriculum and one that engaged clients.

## Chapter 6. Early indicators of impact

In this chapter evidence is summarised to address the following question:

- Are there early indicators of efficiency and effectiveness?

### 6.1 Maternal health-related behaviour

#### a) Smoking and alcohol use

The numbers are too small to come to any conclusions about the impact of the group but it is encouraging that few of these mothers reported any smoking either during pregnancy or after their child's birth and this continued throughout the first year.

Few of the clients reported any smoking during pregnancy; at intake only one out of 19 with data (5%) had smoked in the previous 2 days and at 36 weeks three clients out of 17 with data (18%). At 6 weeks after their child's birth, four out of 18 with data, (22%) had smoked in the previous 2 days, including two who had also smoked at 36 weeks. At 12 months data were available for 15 clients and two reported smoking (13%); neither had smoked during their pregnancy but one did report smoking at 6 weeks post-partum.

No alcohol intake was reported at the two pregnancy data collection time points, with two reporting alcohol use when infants were 12 months. Only one mother reported marijuana use at intake. The drug use questions were not re-applied.

#### b) Breastfeeding

Plans to breast feed were commented upon in interviews, for instance by one second-time mother. While after attempting she had not been able to continue with breastfeeding for her first child she was confident that it would not be the same for her second baby, with the support of gFNP:

*'She will be drinking breast milk when she comes out!'* (C4)

Questions administered in the group and recorded on data forms ask about breastfeeding at several points in the programme, right after the birth (UK012G Infant Birth form), at 6 weeks (UK012AG 6-week Health form), at 6 months and at 12 months (UK013G Infant Health Care form).

Nearly three quarters of the clients with data forms (13/18, 72%; site 1, 8/10; site 2, 5/8) had attempted breastfeeding and 8 of these (44%) were still breastfeeding at 6 weeks. Three mothers were still breastfeeding at 6 months (30% of those ever breastfeeding, 20% of the total). The average age they stopped was 22.3 weeks (range 2 to 52) and the average age that exclusive breastfeeding stopped was 11.5 weeks (range 0 to 32 weeks).

#### c) Family Nutrition

Health related behaviour changes associated with attending the FNP in groups during mid-pregnancy mainly related to having a healthier diet.

*'I thought I ate healthy, but it kind of made me realise I don't.'* (C10)

*'I was having 2-3 fruits a day and before I wasn't having any.'* (C11)

Better diet was also a likely outcome for their infants.

*'We had a nutritionist come in, I started making more home-made foods instead of buying jars, we did as taste test and it did not taste as good as your home-made food. (C2)*

*'I have not given her any jar-food at all, even in an emergency, if you taste it, it's disgusting. ...I was shocked last week when they talked about portion size and they had about three chips and I give a lot more than that; it makes you realise.'* (C5)

#### d) Immunisations

At 6 months infants whose mothers were still attending (N=17) were up to date with immunisations. At 12 months data were available for eight of the nine clients in site 1 and three were said to be up to date with immunisations while five were not.

## 6.2 Child outcomes

### a) Weight

The mean birth weight was 3439 grams (range 2660 to 4320) with no significant difference between the sites. The mean gestation was 40 weeks (range 38 to 41). None had needed time in SCBU. At 6 months child weight was within the average range for most of the infants and development for almost all infants was good.

At six months weight information was available for 14 infants and percentile information for 15. The average weight was 7734 grams (range 5640 to 9560) with similar means for the two sites (site 1, 7776; site 2, 7691). The majority were at percentiles 25 to 50 (4, 27%) or 50 to 75 (6, 40%). Two were above the 90<sup>th</sup> percentile and three were below the 25<sup>th</sup>, one of whom was at the 2<sup>nd</sup> percentile.

### b) Developmental status

At 4 and 10 months the parent report Ages and Stages Questionnaires (Squires, Potter & Bricker, 1999) were administered. The parent decides between 'yes' their child does perform the behaviour (10), 'sometimes does' to identify emerging skills (5) or 'not yet' (0). The range for each of five subscales is 0 to 60; cut-off points are available for each (two standard deviations from the mean in the standardisation sample) and they vary for each scale and at each age (see Table 6.1).

**Table 6.1 Ages and Stages questionnaire mean scores**

	N	Range	Cut-off	mean	Standard deviation
4m communication	13	35-60	<33	52.1	5.8
4m gross motor	13	40-60	<40	55.4	6.6
4m fine motor	13	30-60	<28	52.5	7.2
4m problem solving	13	20-60	<35	54.2	8.2
4m personal social	13	15-60	<33	55.4	6.2
6m socio-emotional	13	0-85	>45	23.0	21.0
12m socio-emotional	7	5-45	>48	30.7	15.4

The Ages and Stages Questionnaires: Social-Emotional (ASQ-SE; Squires, Bricker & Twombly, 2003) documents difficulties in self-regulation and emotional behaviour, and was used in Group FNP at 6 and 12 months. Questions are scored 'most of the time' (10), 'sometimes' (5) or 'rarely or never' (0) and a low score is preferable (range

0 to 300). Again there is a different cut-off score for each age band indicating a child who is at risk and needs follow-up (see Table 6.1).

Four and six month information was available for 13 infants (site 1, 5; site 2, 8; see Table 6.1). The mean scores for 4 month development are all close to the maximum, with only one child below the cut-off points, for problem solving and personal-social skills. One child (not the same one) had socio-emotional problems above the cut-off of the 6 month ASQ-SE. No 10 months ASQ data have yet been recorded. At 12 months there were no children above the cut-off for the ASQ-SE.

### 6.3 Maternal life course

#### a) Birth control

The Demographics Update form (UK011G) includes questions about birth control. Data were available for 15 clients and all but one reported using birth control, with the other client reporting abstinence. The frequency of using birth control was every time for 10/14 (71%) and most of the time for 2/14 (14%). The most popular type of birth control was a hormonal implant (7) or the pill (5) with three reporting use of condoms (one in conjunction with the pill). None of the clients had become pregnant by 6 months.

### 6.4 Maternal role

#### a) Stimulating child development

Mothers remarked in their interviews on their increased involvement in play activities:

*'I might be watching a TV show and I sometimes forgot to play with him, and part of me wants him to leave me alone but they keep telling you how important it is to interact with them and play and talk, so I make sure I am giving him time.'* (C1)

*'We have started going there [Children's Centre] and we do tots time about doing activities with my children. I also learned about slowing down and repeating words.'* (C5)

#### b) Home safety

Other important aspects of change mentioned in some interviews was establishing and maintaining home safety. One mother talked about learning how to stop your child doing something such as playing with the television buttons saying:

*'They talked about distraction; give them something else for them to do.'* (C3)

Two clients discussed being given cheaper safety equipment if you join a children's centre and they found that particularly helpful information:

*'The last session we did dangers and looking around the room and what kinds of dangers there were. There is more than you think. They sorted out with the Children's Centre to see if I could get help with safety gates as they are 25 pounds and you can buy a brand new safety gate for a tenner. So it has saved us a lot of money.'* (C11)

*'They told us that if you joined the Children's Centre you could get cheap safety equipment, so I registered.... It was all about safety and they told us to get down on our knees and look from a baby's point of view.'* (C14)

#### c) Confidence as parents

The home safety quotes illustrate that information has been provided in a manner that has allowed the mothers to come to their own decisions rather than being told in a dogmatic manner, as this mother described in the context of deciding between breast and bottle feeding:

*'The thing with midwives is that they make you feel bad with the choices you are making and those two [Group FNP FNs] never have. They will tell you how it is supposed to be, but if you don't do exactly what you are supposed to do they never say "well this is what you do", they just tell you that you need to trust in your decisions and if you have problems to come to them. (C6)*

The nurses responded positively when commenting on changes they had observed in the clients overall. While some highlighted changes such as eating more fruit and their continuation of breastfeeding others pinpointed more emotional changes such as an increased confidence, which allowed them to speak up when they had concerns.

*'They seem to have moved on. They are thinking about work and planning things.'*

*'I would say most of them are quite confident....we have got two people moving into houses of their own and they have never lived on their own before.'*

*'She is really questioning some of the things that happen in the nursery.'*

One client talked about how they had discussed persuading their partners that it was important to have time as a family.

*'They were talking about you have to try and keep convincing them that babies need family time as well not just one person.'* (C1)

In contrast another was making equally important decisions about restricting the role that her baby's father had:

*'[FN] has helped me a lot with (child)'s dad from the word go, I wanted to hear if Social Services considered him safe to be around her, she has helped me with them....he is not having contact and I rang him and explained.'* (C10)

## 6.5 Referrals to other agencies

**Table 6.2 Details of referrals by phase of the programme**

Type of referral	Pregnancy	Infancy	Total
Client health care	9	2	11
Housing	4	4	8
Safeguarding	2	2	4
Children's Centre	2	2	4
Citizen's Advice Bureau	2	0	2
Mental health	2	0	2
Nutrition (look & eat)	2	0	2
Police protection unit	2	0	2
Housing benefit	1	1	2
Child health care	0	2	2
Injury prevention	0	2	2
Fire prevention	0	1	1
Smoking cessation	1	0	1
Domestic violence	1	0	1
Income support	0	1	1



Unemployment benefit	0	1	1
Sexual health	0	1	1

FNs can make referrals to other services. In total 41 referral forms (UK004G) were completed for 13 clients (site 1, 4; site 2, 9); more than half in pregnancy (23, 56%), and the majority in site 2 (32, 78%). On the UK001G forms it is possible to indicate that a referral was made, but without any details. Based on these 53 referrals were made for 15 clients (site 1, 7; site 2, 8). Combining the two sources of information, at least one referral was made for 16 of the 23 clients (70%; site 1, 7; site 2, 9). The average number of referrals was 3.2 (range 1 to 10) based on the UK004G and 3.5 (range 1 – 12) based on the UK001G. Details are given in Table 6.2; in pregnancy the focus was on maternal health, whereas housing, safeguarding and Children’s Centre services featured equalling in pregnancy and infancy. In infancy child health and injury prevention referrals were made.

## 6.6 Engagement with Children’s Centres

Most of the clients interviewed reported having attended some activities other than the FNP group at the Children’s Centre. They made positive remarks about the experiences, such as singing and toddler time, library sessions, day trips out and baby signing (learning sign language).

*‘I went to a couple of weaning sessions they were really good. I went to a sing-a-long session on a Friday’ (C5)*

*‘I went to stay and play and I have used the sensory room. I love it.’ (C11)*

Compared to the individual FNP mothers, some of whom had also felt unwelcome at children’s centre activities (Barnes et al., 2010, 2011) the gFNP clients seemed to be attending children’s centres more often. There were hardly any who had not been to at least one activity and some reported they would go to the children’s centre once the group had ended.

## 6.7 Conclusions

In chapter 3 it was reported that the clients considered that the group had made a difference and they described many ways that they had gained information from the group, particularly about how to interact with their baby in a way that would promote development, and how to manage the potentially challenging parenting task of weaning. The outcomes described in this chapter indicate that many aspects of their parenting appear to be indicative of good parenting, such as the rate of breastfeeding, the take-up of immunisations, their attention to providing healthy food, their confidence in relationships with partners and their focus on home safety. A randomised trial will be able to demonstrate whether these are an improvement compared to mothers not receiving the programme but they appear to be promising.

## Chapter 7. Conclusions

What can be concluded about the delivery of gFNP and what changes might be needed for delivering subsequent groups?

- Overall the programme was delivered well and covered the content that is recommended for pregnancy and infancy, and the extent of exposure to the programme was close to or exceeded the recommendations for home-based FNP for most clients.
- The nurses and clients feedback is very positive and provides support for the argument that group FNP has been received well over the whole time period of the programme for practitioners and group members.
- The mothers reported having developed strong friendships and bonds with each other and some had independently organised meetings without the FNs. For some this was because they would have liked to meet weekly instead of every two weeks.
- Referrals were made for most of the clients indicating that good links were being made with other services, and many of the mothers had been to a children's centre for other activities.
- Attendance in late infancy was affected by maternal employment; while they were able to gain agreement for attendance at pregnancy sessions it was not so readily given for meetings in infancy.
- Clients are interested in the programme content throughout and could report many ways that the programme has made an impact on the way that they are bringing up their infants.
- Despite, or perhaps because of, the presence of the infants and their increased activity, during infancy clients paid close attention to the materials and understood them, with little or no disagreement about the information being provided. The clients themselves reported that they and feel they are listened to across the whole duration of the programme.
- FNs were able to use any differences in opinions in the group about child-rearing, to illustrate variability and to help mothers to be realistic about expectations of their infants' behaviour.
- Mothers' bond with their group members and pleasure in watching their babies play seems to be strong but they are still open to new learning.
- While the presence of infants had many advantages, as they became more mobile and vocal it becomes increasingly difficult to facilitate discussions and carry out exercises, suggesting that some provision of child care would be advantageous.

## References

- Bandura, A. (1977) Self-efficacy: toward a unifying theory of behavioural change. *Psychological Review*, 84, 191-215.
- Barnes, J., Ball, M., Meadows, P., McLeish, J., Belsky, J. and the FNP Implementation Research Team. (2008). *Nurse-Family Partnership: First year pilot sites implementation in England. Pregnancy and the post-partum period*. Research Report DCSF-RW051. London: DCSF.
- Barnes, J., Ball, M., Meadows, P., Belsky, J. and the FNP Implementation Research Team. (2009) *Nurse-Family Partnership Programme: Second year pilot sites implementation in England. The infancy period*. Research report DCSF-RR166. London: DCSF
- Barnes, J., Ball, M., Meadows, P. Howden, B., Jackson, A., Henderson, J. & Niven, L. (2011) *The Family-Nurse Partnership Programme in England: Wave 1 implementation in toddlerhood and a comparison between Waves 1 and 2a of implementation in pregnancy and infancy*. London: Department of Health.
- Grady MA, Bloom KC. (2004) Pregnancy outcomes of adolescents enrolled in a Centering Pregnancy program. *Journal of Midwifery and Women's Health*, 49, 412–20.
- Ickovics , J.R., Kershaw, T.S., Westdahl, C. et al., (2007) Group prenatal care and perinatal outcomes: a randomized controlled trial. *Obstetrics and Gynecology*, 110, 330-339.
- Ickovics , J.R., Kershaw, T.S., Westdahl, C. et al., (2003) group prenatal care and preterm birth weight: results from a matched cohort study at public clinics. *Obstetrics and Gynecology*, 102, 1052-1057.
- Pearlin L.I & Schooler C. (1978) The structure of coping. *Journal of Health and Social Behavior*, 19, 2-21.
- Robertson, B., Aycock, D.M. & Darnell, L.A. (2009) Comparison of Centering Pregnancy to traditional care in Hispanic mothers. *Journal of Maternal and Child Health*, 13, 407-414.
- Squires, J., Bricker, D. & Twombly, E. (2003) *The ASQ-SE user's guide for the Ages & Stages questionnaires: social-emotional. A parent-completed, child monitoring program for social-emotional behaviours*. Baltimore, MD: Paul Brookes Publishing Co.
- Squires, J., Potter, L. & Bricker, D. (1999) *The ASQ user's guide: for the Ages & Stages Questionnaires: a parent-completed, child-monitoring system*. Baltimore, MD: Paul Brookes Publishing Co.

Williams, K.J., Zolotor, A., & Kaufmann, L. (2009) Does group prenatal care improve pregnancy outcomes? *Journal of Family Practice*, 58, 7, 384a-384c (online).