Birth Companions Research Project: Experiences and Birth Outcomes of Vulnerable Women

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Executive Summary

A. Aim and objectives

Midwifery researchers at the University of Central Lancashire (UCLan) were commissioned by Birth Companions to undertake a study to compare birth related/outcome data and experiences of support between vulnerable women who had and had not received support from Birth Companions. The key objectives were:

- To analyse 12 months of anonymised socio-demographic and birth related/outcome data of women birthing at the Whittington Hospital to compare differences between vulnerable (those who were referred into the Vulnerable Adults and Babies Midwifery (VABM) team at the Whittington Hospital due to safeguarding/child protection concerns) and non-vulnerable (those with no safeguarding/child protection concerns identified) women. Further analyses of the data within the 'vulnerable only' sub-sample were undertaken to explore and compare differences between those who had (from Birth Companions and/or the VABM team) or had not received additional support.
- To explore experiences and satisfaction with perinatal support received among vulnerable women who had/had not received additional support.

B. Overview of services

VABM team

All women who have safeguarding/child protection concerns are referred into the VABM service which comprises a full-time safeguarding lead and two midwives (who work on a job share basis). Service provision includes:

- A 'meet and greet' session for all women/families referred into the service
- Advice and support to community midwives to produce and enact appropriate care plans
- The two VABM midwives case-load a small number of women who meet a high threshold of need. This includes all the women's antenatal care and in more 'exceptional' circumstances intra-partum and postnatal support is provided.
- 'One stop' service for other agencies or professions to contact about specific women

Birth Companions

Birth Companions is a London based registered charity that trains volunteers to provide care and support to vulnerable/at risk women. This project provides perinatal support in home, hospital and community locations that includes:

- Empowering women to be involved in the care they receive (e.g. writing birth plans)
- Doula support during labour
- Postnatal support through visits, telephone calls and texts
- Practical support with infant feeding and other aspects of parenting which includes the provision of baby clothes and equipment and small grants for essentials
- Referrals into wider support networks/services

The VABM midwives, as well as other maternity professionals refer women into Birth Companions. While there are no formal criteria for referral, women are more likely to be referred if they are isolated and/or unsupported.

C. Methodology

- **Design**
  A mixed-methods study was undertaken using quantitative (socio-demographic and birth related/outcome) data and qualitative interviews.
- **Participants/Data Collection**
  Routinely collected socio-demographic and birth related/outcome data were recorded for all women who birthed at the Whittington Hospital over a 12 month period (1st July, 2014 – 30th June, 2015). Semi-structured interviews were undertaken with a purposive and stratified sample of women.
- **Data analysis**
  Descriptive and inferential statistics of the socio-demographic and birth related/outcome data were undertaken using SPSS v. 22. Analysis of the interview data was undertaken using Braun & Clark's (2005) thematic framework, supported by MAXQDA qualitative data analysis software.
- **Ethics**
  Ethics and governance approval was sought via a National Research Ethics Service committee, the Research & Development unit at the Whittington Hospital and via one of the ethics sub-committees at UCLan.

D. Findings

Socio-demographic and birth related/outcome data

A total of 3,511 women birthed at the Whittington Hospital during 1st July, 2014 - 30th June, 2015. Three hundred and fifteen (8.9%) women were identified as 'vulnerable' of which 24 (7.6%) received additional support either through Birth Companions (n=5, 1.6%), the VABM team (n=14, 4.4%) or both Birth Companions and the VABM service (n=5, 1.6%). Analyses of socio-demographic and birth related/outcome data were undertaken between the following groups:

a) *Vulnerable versus non-vulnerable:* Comparisons between vulnerable (n=315) and non-vulnerable (n=3,196) women.
b) *Vulnerable only* (n=315)*:* Comparisons between women who were: a) case-loaded by Birth Companions (n=10) (including those who received support from Birth Companions and the VABM team (n=5)); b) case-loaded by VABM service (n=14) and c) referred into the VABM service only (n=291).

Comparisons between vulnerable versus non-vulnerable population

Vulnerable women were significantly:

- More likely to be of a younger age ($p=0.001$, t-test)
- More likely to be from a black or minority ethnic group ($p<0.001$, chi-square test)
- More likely to attend a booking appointment at a later time period ($p=0.001$, t-test)
- More likely to be a current/previous smoker ($p<0.001$ chi-square test)
- Less likely to experience a perineal tear ($p=0.007$, chi-square test)
- More likely to stay on the postnatal ward for a longer period of time ($p<0.001$, t-test)

- More likely to have a baby born at an earlier gestational age ($p<0.001$, t-test)
- More likely to have an infant with a lower birth weight ($p<0.001$, t-test)
- Less likely to have initiated breastfeeding post-birth ($p<0.001$, chi-square test)

Comparisons within 'vulnerable only' sub-sample
A higher percentage of women who received support (from Birth Companions and/or the VABM team) compared to those who were referred only were:

- Older, had fewer previous pregnancies and were from a black or minority ethnic group*
- More likely to be current/previous smokers
- Very 'late bookers' (i.e. attended a booking appointment at 26+ gestational weeks)
- More likely to have had a spontaneous delivery*
- Less likely to have used anaesthesia during delivery*
- More likely to have used medication during labour
- Less likely to have experienced a perineal tear
- More likely to have had a vaginal birth*
- More likely to have had a longer stay in hospital*
- More likely to have had a baby born at 37+ week's gestation
- More likely to have had a low birth weight baby (under 2.5kgs)
- More likely to have breastfed their infants post-birth*

* Particularly for those who received support from Birth Companions

Interview data
Seventeen women took part in an interview. This sample included women who were case-loaded/supported by: Birth Companions (n=5); Birth Companions and the VABM team (n=4); the VABM service (n=2) and those who were referred into the VABM team only (n=6). Insights from the qualitative data highlighted:

- Women had multiple reasons for referral into the VABM service reflecting the complexity of their life situation. The reasons included: being destitute/homeless; substance abuse; child protection concerns; socially isolated; domestic abuse; self-harm; asylum seekers and mental health issues.
- A number of the vulnerable women had no/minimum support from within their personal networks.
- Those who did not receive additional support (via Birth Companions and/or the VABM service) often had to give birth unaccompanied; faced challenges due to a lack of continuity and opportunities to form relationships with maternity professionals and experienced inappropriate, insensitive and inconsistent care from maternity and statutory providers.
- Those who received informational, practical, emotional and social support (via Birth Companions and/or VABM team and on occasion from 'positive' support provided by wider maternity providers) described how this enabled them to:
    - Feel more prepared for the birth
    - Receive non-judgemental and needs-based care and support
    - Forge positive and trust based relationships
    - Feel more calm and in control during the labour, which in turn enabled them to experience a positive birth
    - Be more knowledgeable about infant feeding and to successfully breastfeed their infants

- Receive necessary and essential mother and baby related items*
- Feel a sense of reassurance and enhanced wellbeing via flexible, available and accessible support provision*
- Feel less alone and isolated in their situation*
- Receive and access the support they needed via wider statutory providers
- Be sign-posted into wider support networks*
- More confident in their parenting abilities*

* Particularly for those who received support from Birth Companions

E. Conclusions & Recommendations

It was difficult to make any firm claims about the 'additional' benefits of women receiving support from Birth Companions due to the small numbers involved, and many had received support from the VABM service. However, women who received support from Birth Companions frequently referred to feeling less isolated, more informed and better prepared (for the birth and parenting); leading to improved wellbeing and confidence. As the VABM service only tends to offer antenatal support and Birth Companions provide services across the perinatal period, this combined care approach also appeared to dovetail to create more positive experiences and outcomes for women. The women in receipt of support from Birth Companions were less likely to be induced and use anaesthesia during labour, and were more likely to have a vaginal delivery and to breastfeed their infants following the birth.

A number of key overarching recommendations which largely focus on improving women's access to, and receipt of additional support are as follows:

- From a hospital trust perspective the VABM service it is not seen as a priority and lacks funding. Case-loading opportunities for the VABM midwives are limited. The high number of referrals also means that the VABM midwives are unable to follow-up individual cases to ensure that suitable support has been provided or accessed. Additional resources would allow more time for the planning and development of the service and further opportunities to provide targeted support.
- Currently, the number of women who are referred into Birth Companions is low. An increase in referrals could help to alleviate pressures on the VABM service, as well as enable appropriate, needs-based support to be provided for more women and their families. Opportunities to increase referrals could be achieved through regular meetings between the VABM team and Birth Companions staff, as well as volunteers being present at the 'meet and greet' session with a VABM midwife.
- The difficulties and challenges faced by women who did not receive additional support during the intra-partum period warrants further attention. This could be achieved by increasing referrals into Birth Companions and women being accompanied by a doula. However, it also emphasises a need for additional training or co-working with the hospital midwives to ensure that appropriate support is provided.
- Due to the identified difficulties in the recording and monitoring of vulnerable women, hospital-based IT systems should be adapted to record all women who receive support (via the VABM service and Birth Companions). This would enable on-going monitoring and assessment of who has safeguarding concerns, what these concerns are, the support these women receive as well as the impact of such on key birth related outcomes.

A. Aim and Objectives

The main aim of the study was to compare birth related/outcome data and experiences of support between vulnerable women who had and had not received support from Birth Companions. The key objectives were:

- To analyse 12 months of anonymised data of women birthing at the Whittington Hospital to compare differences in socio-demographic and birth related/outcome data between vulnerable (those who were referred into the Vulnerable Adults and Babies Midwifery (VABM) team at the Whittington Hospital due to safeguarding/child protection concerns) and non-vulnerable women (those with no safeguarding/child protection concerns identified). Further analyses of the data within the 'vulnerable only' sub-sample were undertaken to explore and compare differences between those who had (i.e. case-loaded by Birth Companions and/or the VABM team) or had not (i.e. referred only) received additional support.
- To undertake interviews with vulnerable women who had received different models of care (i.e. women who were case-loaded by Birth Companions and/or the VABM team, and those who were referred into the VABM service only). Interviews were designed to explore women's experiences and satisfaction with the perinatal support received.

B. Background

In this section a short literature review that highlights the difficulties and issues faced by vulnerable women is provided. A summary of the ethos and remit of Birth Companions and the Vulnerable Adults and Babies Midwifery (VABM) at the Whittington Hospital is detailed, followed by an overview of how these services work together to provide care, support and optimise outcomes for women/families who are most in need.

B.1. Issues faced by vulnerable women

Promoting health in pregnancy and after birth is a clinical priority. The Department of Health (DH) Getting the Right Start: National Service Framework for Children states *'improving the health and welfare of mothers and their children is the surest way to a healthier nation'* (DH, 2007). Approximately 700,000 women give birth every year in England and Wales. However a number of these women face complex psychosocial and economic challenges that negatively affect their underlying health and levels of social support. Research has identified that women who: live in areas of high deprivation, are from BME backgrounds, experience domestic violence, have a history of substance use, have poor mental health or who give birth at a young age are at particular risk of poor maternal and infant health outcomes (Lewis, 2004 & 2007; DH, 2007; National Institute for Health and Care Excellence (NICE), 2010 & 2012; Hollowell, 2012).

Many of these 'vulnerable' women suffer from social isolation and low levels of social support (NICE 2010; Maternity Action 2013). They are also more likely to access maternity care later in their pregnancy and receive less antenatal care than non-vulnerable women (Rowe & Garcia, 2003; Lewis, 2004, 2007 & 2011; DH, 2007; Downe et al., 2009; Hollowell, 2009; NICE, 2010; Mabelis & Marryat, 2011; Hollowell et al., 2012; Kapaya et al., 2015) There is evidence that women who face complex psychosocial issues have an

increased risk of maternal mortality (Lewis, 2004, 2007 & 2011; Knight et al,. 2014), increased incidence of preterm birth and low birth weight babies (Goldenberg, 2008; Gray, 2008, Shah, 2010; NICE, 2012; Dean et al., 2013) increased perinatal death and infant mortality (Confidential Enquiry into Maternal and Child Health (CEMACH)), 2009; Gray et al., 2009; Flenady et al., 2011; Cross-Sudworth et al., 2015) as well as higher levels of obstetric intervention (D'Souza & Garcia, 2004; Oakley et al., 2009). These women are also more likely to experience perinatal mental health issues (Ross & Dennis, 2009; Yelland et al., 2010; Pearson et al., 2011; Tyler, 2012; O'Hara & McCabe, 2013) and have lower levels of breastfeeding initiation and continuation (Hoddinott & Pill, 1999, NICE, 2005).

The need for initiatives to improve the health or health promoting behaviours of vulnerable women and to reduce health inequalities in child health has been highlighted (Small, 2011; NICE, 2012). In response, a range of interventions that focus on increased health, social and emotional support for vulnerable women, have been introduced across the UK. These include the development of NHS guidelines (NICE, 2010), targeted midwifery provision (such as via the VABM service and the Home Start and Sure Start initiatives to support families and young children (McCauley et al., 2004; The National Evaluation of Sure Start (NESS), 2010) as well as measures to promote positive health behaviours including smoking cessation (NICE, 2013) and breastfeeding (Renfrew et al., 2005; NICE, 2006, 2008). Charitable organisations both national i.e. National Childbirth Trust, as well as local, i.e. Birth Companions, have developed a range of initiatives to support women facing a range of vulnerabilities in pregnancy and early motherhood (McLeish & Redshaw, 2015). These include providing doula services for vulnerable women (Hamilton & Foster, 2015), supporting refugee and asylum seeking women (McCarthy& Haith-Cooper, 2013), minority ethnic women (Tew, 2006; Hollowell, 2012), women at risk of depression or mental ill health (Cornell, 2010; White, 2015), incarcerated and other vulnerable women (Birth Companions, 2013; Shaw, 2015). Early perinatal interventions offer maximum scope for positive effects on lifelong health and wellbeing. While there has been some debate over the effectiveness of these interventions evidence suggests that targeted support may act to reduce pre-term delivery, low birth weight and infant mortality in women with complex psychosocial issues (Hollowell, 2011).

B.2. Birth Companions

In 1996, inspired by the campaign of Sheila Kitzinger to stop the practice of shackling incarcerated women during labour, a group of London-based antenatal teachers established a Holloway doula group. Over time this group expanded to become Birth Companions and is currently a registered charity that provides volunteer support to women with different complex needs and who face a range of adversities. These include women who are: incarcerated, foreign nationals, asylum seekers as well as those who have mental health issues, child protection concerns, those who experience violence and abuse, and who are young parents. The service offers information, practical, emotional and social support to women who are isolated and most in need.

The ethos of Birth Companions is to work in a trauma-informed and woman-centred way. The approach is non-judgemental and is about providing women with information and supporting her choices; therefore even if support is offered, it is entirely the woman's decision as to whether and how this support is accessed. This service is primarily provided by Birth Companion volunteers. These are women from different professional backgrounds and/or a history of providing voluntary support to women in the perinatal period, e.g. trainee midwives, antenatal teachers, breastfeeding supporters. Other volunteers are women whose

main motivation is to help others. All the volunteers undergo a year of in-house training and also undertake observations on the labour ward at the Whittington Hospital to gain experience. Specific activities/services are:

- In Holloway and Bronzefield prisons Birth Companions run a weekly group for pregnant women. Information about pregnancy and birth is offered, and women are encouraged to write birth plans that consider their needs and preferences for labour. Birth and postnatal support is also offered to women from Holloway prison who give birth at the Whittington Hospital. As Holloway's Mother and Baby Unit (MBU) closed in 2013, many women are now transferred before birth to another prison with a MBU, such as Bronzefield prison. Previously, a Birth Companions group for mothers and babies was run on the Holloway MBU which was particularly successful in supporting women with breastfeeding. A similar group is now run in Bronzefield prison.

- The Community Link project was developed in 2010 by Katie Bottle, the Community Link Co-ordinator. It was established through an awareness of how women who were supported in Holloway prison were often being released into the community with no/limited family or personal networks available to them. This service was subsequently extended to other women who are isolated and face similar challenges. Women are referred into the Community Link project from a range of services and agencies including the Helen Bamber Foundation, the Red Cross, Hibiscus and specialist midwives in London hospitals. Women can also self-refer or request continued support from the service post-release from prison. The majority of women supported by this service are due to give birth at the Whittington Hospital.

  This project provides perinatal support in home, hospital and community locations. It includes empowering women to be involved in the care they receive (such as through writing birth plans). If a woman requests support when she goes into labour, a Birth Companion volunteer will meet her at the hospital and stay with her during labour and birth. Postnatal support is also provided up to a minimum of six weeks[1] through visits, telephone calls and texts. Practical support with infant feeding and other aspects of parenting are provided as necessary and include the provision of baby clothes and equipment and small grants for essentials. The baby items are recycled and provided through Pramdepot, an organisation set up by one of the Birth Companion volunteers. Birth photos can be taken and the volunteers also offer support to family members if requested by the woman. The service also has a part-time Breastfeeding Supporter post to help support women who wish to breastfeed their infants. Birth Companions link women into other services and community support networks such as Children's Centres, as well as supporting women in contacting other statutory agencies, i.e. housing, immigration and social services. Language support (for specific languages) can also be provided through the volunteers.

Birth Companions are currently operating at full capacity in terms of the number of women they can support. However, it was recognised that across London there were high numbers of vulnerable women with complex needs who would benefit from this service. In order to try

[1] This is a flexible time scale in that support may be shorter or longer dependent on need and whether the woman is able to access appropriate support elsewhere.

influence practice and care, Birth Companions undertake presentations at conferences or learning events with health professionals to raise awareness about women's needs, share expertise (i.e. for women who have to separate from their infants, based on their work within prisons) and provide insights into how support should/can be provided. They are also consulting with the Royal College of Midwives about developing learning modules in using a trauma informed approach.

Another area in development is the integration of previous service users. This is due to the women's repeated requests to *'give something back'*[2], to continue their involvement in the service and to help others. In principle, this would mean that women could be supported by volunteers who have a shared background, and a deeper level of empathy and understanding of their situation[3]. However, it was equally recognised that appropriate training and support would be needed to ensure the former service-users had the qualities, insights and supportive networks to undertake this role effectively.

B.3. Vulnerable adults and babies midwifery (VABM) team[4]

The VABM (or the 'Yellow Team'[5] as referred to in-house) team at the Whittington Hospital was established in 2007. High profile cases, namely Victoria Climbie and 'Baby P' highlighted that maternity services were failing to identify and respond to safeguarding/child protection issues[6]. In response to these concerns, NHS Trusts across the UK developed a 'safeguarding' midwifery-based role or team, that midwives could liaise and consult with when concerns were raised. At the Whittington Hospital, a full-time safeguarding lead[7] was appointed and two midwives (Heather Jenkins and Jo Austin) were employed on a job-share basis to implement a VABM 'safeguarding' service[8]. Rather than working to a prescribed remit, these midwives were given a *'blank canvas'* to develop the service. While existing safeguarding midwifery models were initially considered for ideas, a more 'intuitive' approach was adopted in order for the service to best suit the needs of the Trust (from a professional and woman-centred perspective).

At the time of undertaking this study, all women who have safeguarding/child protection concerns (due to complex psychosocial issues, such as mental health, domestic violence, substance misuse, etc.) are referred into the VABM service. The VABM midwives provide advice, support and work directly with the community midwives to produce care plans to provide suitable intra-partum and postnatal care. The aim being that a *'safety net'* is in place

[2] Previous service users were reported to have donated the items they were provided with, e.g. pram or cot in order that other women could benefit from these items.

[3] Which is more consistent with the concept of peer support developed by Cindy-Lee Dennis (2003)

[4] An interview was held with Logan van Lessen, Jo Austin and Heather Jenkins in January, 2015 in order to capture an overview of the development and remit of the VABM service.

[5] The VABM service is called the 'yellow team' to prevent women being stigmatised. Yellow is also a 'warning colour' as historically any child protection concerns used to be written on yellow paper in the women's hospital notes.

[6] This situation is largely attributable to the fact that community midwives were tasked with identifying and responding to key 'risk' factors; a role that they often had insufficient time and expertise to undertake effectively.

[7] Jacqueline Davidson is the main safeguarding lead at the Whittington Hospital, and was not directly involved in this study. HJ/JA both report to the safeguarding lead, and when neither midwife is available, she is responsible for responding to/addressing issues from within the service.

[8] HJ/JA both accessed specialist training, i.e. child protection and safeguarding to develop their knowledge and skills.

whereby women are linked into appropriate services (hospital and/or community based) and that additional support is provided to meet their individual needs[9]. The VABM midwives offer a 'meet and greet' service whereby they meet the woman (and partner/family members as appropriate) on a one-off occasion to discuss and direct them to suitable support. The VABM also provide a 'one stop' service for other agencies or professions, e.g. social services or psychiatry, to contact about specific women. This was established due to the limited availability of community midwives, and also to help streamline and provide continuity in terms of what, who and how support was being provided.

Due to resource restrictions, the VABM midwives are only able to case-load a small group of women per year (i.e. ~6-10 women per midwife)[10]. As a result the threshold for case-loading is very high and the service is reserved for the most complex clients, i.e. those deemed to be highly vulnerable and have difficulties in engaging with traditional midwifery services[11]. Outreach services are provided through visits at home or in other settings (i.e. psychiatric ward) and the VABM midwives accompany women to specialist appointments (e.g. substance misuse services). This care tends to be limited to the antenatal period, with the VABM midwives providing all, and often an increased number of antenatal contacts. Only in exceptional circumstances, and where possible, do the VABM midwives offer support during labour, i.e. when a woman who is case-loaded is having a planned caesarean. Other occasions where intra-partum support is provided is when the woman's labour coincides with one of the VABM midwives being on duty, or as part of their labour ward days – however this tends to be coincidental rather than planned. Furthermore, while 'some' postnatal support is provided, it is more usual for the VABM service to end at women's discharge from the postnatal ward, and for the care-plan to be implemented by community midwives, other professionals (i.e. health visitors) and/or other services involved (i.e. Perinatal Mental Health Team).

The VABM midwives have also recently been assigned a clinical supervision role that involves supervising all midwives in child protection procedures.

B.4. Working across boundaries to deliver optimum care and support

All midwives at the Whittington Hospital are aware of Birth Companions, and believed to be cognizant of the value and ethos of the service (such as through providing flexibility in volunteer contacts with women (i.e. outside of visiting times) on the postnatal ward[12]). While there are no formal criteria for referral into Birth Companions, women are more likely to be referred[13,14] if they are isolated and/or unsupported. This includes women who: have no-one to support them in labour; limited or no family/personal networks or if their partner is 'unreliable' in terms of drug/alcohol use or an abusive relationship. Some women may also be supported by Birth Companions but not be known to, or case-loaded by the VABM team.

[9] For example, this could be a direct referral into the Perinatal Mental Health Team for those with mental health conditions, or an enhanced postnatal package for women at risk of postnatal depression.
[10] The original intention was for the VABM service to case-load approximately 10 women per year.
[11] This could include sitting in a waiting room for a 10-15 appointment with a midwife.
[12] It was considered that due to close working relationships and established links at the Whittington, the midwives were more understanding and appreciative of the 'family' based support the volunteers provided.
[13] While referrals are predominately made by the VABM midwives, on occasion a referral is received by other members of the midwifery team. Birth Companions also liaise with the midwifery team at the Whittington who provide support to women in Holloway prison.
[14] All referrals are made using a form designed by Birth Companions.

This situation can occur when women have not been referred into the VABM team during the antenatal period or through self-referrals into Birth Companions.

Birth Companions and the VABM service provide a complementary service - the VABM being an extension of the maternity care offered at the Whittington and Birth Companions offering support that is more aligned with a friend/family approach. The two services also operate on a 'partnership' basis through the transfer of relevant information[15], liaising closely for more difficult issues (i.e. immigration status), and coordinating care[16]. Furthermore, while the VABM service is predominantly focused on the pre-natal period, Birth Companions provide support across the perinatal continuum through antenatal contacts, support during labour[17] and prolonged postnatal support. Birth Companions also offer a range of other support that the VABM cannot provide, such as:

- Financial support for women;
- 24 hour phone access;
- Social contacts with the women;
- Access to practical items;
- Knowledge of other charities/services that can assist the women.

Over 1st July, 2014-30th June, 2015, Birth Companions provided support to 14 women who gave birth at the Whittington Hospital. Six of these women had been referred by the VABM team, three referrals were from other members of the midwifery team at the Whittington Hospital and the other women (n=5) had either self-referred or were known to Birth Companions through their work in prisons[18].

C. Methodology

C.1. Design

A mixed-methods study was undertaken, drawing on quantitative (socio-demographic and birth related/outcome data) and qualitative data (interviews) to explore for differences amongst vulnerable women who did/did not receive support from Birth Companions. Analysis was also informed by a 'realist' evaluation framework (Pawson & Tilley, 1997; Pawson et al, 2004) to identify the key 'mechanisms' through which positive outcomes can be achieved (or not as the case maybe).

C.2. Participants/Recruitment

Routinely collected socio-demographic and birth related/outcome data were recorded for all women who birthed at the Whittington Hospital over a 12 month period (1st July, 2014 – 30th June, 2015)[19]. Additional identifiers were linked to individual cases to identify women who

[15] With consent obtained from the woman as appropriate.

[16] For example, as Birth Companions are unable to pay for translators, the visits are coordinated so that the Birth Companion volunteer can meet the woman at her pre-booked hospital appointment when an interpreter is present.

[17] This occurs only when the woman agrees to/requests this support. If the woman already has a birth partner, a birth companion volunteer can operate as a *'back*-up', just in case her support is needed.

[18] Four of these women received antenatal, intra-partum and postnatal support; seven had received antenatal and postnatal support and three had received postnatal support only.

[19] All data were provided by an IT lead at the Whittington Hospital

had been referred into the VABM service, the reasons for referral and type of support received (i.e. case-loaded by Birth Companions service and/or the VAMB team)[20].

Semi-structured interviews were undertaken with a purposive sample of women. The inclusion criteria were that the woman had been referred into the VABM service; had sufficient English to participate in an interview and had no complications post-birth (e.g. comprised mother or infant health). A stratified sampling framework was also applied to identify and recruit women who had received different types of support. The sample included women who had been case-loaded by Birth Companions and/or the VABM team as well as those who had been referred into the VABM service only[21].

Eligible women were approached by midwifery staff[22] either during pregnancy (i.e. late third trimester) or the early postnatal period to take part in the study. A verbal overview of the study and a detailed information sheet were provided at this stage. All women were provided with at least 24 hours to make a decision regarding their participation and then asked to sign a consent form. All interviews were undertaken in the first week post-birth either on the postnatal ward or at the woman's home.

C.3. Data collection

C.3.1. Birth related/outcome data

Data (socio-demographic and birth related/outcomes) for all women who birthed at the Whittington Hospital over a 12 month period (1st July, 2014 – 30th June, 2015) were anonymised and forwarded to the UCLan team for analysis purposes[23]. The data included:

a) Socio-demographic data (i.e. age, ethnicity, number of previous pregnancies, gestational age at booking, smoking history, whether the woman was classified as vulnerable (by virtue of being referred into the VABM service due to a safeguarding/child protection concern), reason for referral and type of support received (i.e. case-loaded by Birth Companions and/or the VABM team, or referred only).
b) Birth related/outcome data included: type of onset of labour, whether anaesthesia and/or medication was administered during the intra-partum period, whether an episiotomy was performed, type of perineal tear experienced, route of delivery, outcome of delivery (live/stillbirth), gestational age of infant at delivery, birth weight, length of hospital stay, Apgar scores and infant feeding method post-birth.

The inclusion of these data types/categories was to some extent pragmatic due to funding issues and what could be readily accessed via the Whittington IT recording systems. It was

[20] This information was provided by the VABM midwives to the IT lead who then recorded these details against the corresponding women's names/details on the data file

[21] Although it is important to note that 'extra' support will have been provided to these women via the 'meet and greet' session, the care-plans developed with the community midwife and referrals into other services, i.e. the Perinatal Mental Health Team.

[22] Originally it was intended that this would be undertaken by the two midwives within the VABM service (JA/HJ). As there were issues recruiting women who had not received direct support from the VABM service, community midwives were asked to help identify and recruit women for interview purposes. Details of those who agreed to participate were forwarded to the VABM midwives for follow-up purposes.

[23] Data were issued on a quarterly basis.

originally intended that additional information such as the number of antenatal/scan appointments the woman attended would be analysed. As this information was recorded on separate database/IT systems, and would have required extensive resources to marry up the individual cases, this was not possible. All data types/categories were agreed with Birth Companions and the Whittington Hospital[24].

C.3.2. Semi-structured interviews

A semi-structured interview schedule was designed (by the UCLan team in conjunction with Birth Companions). Questions related to the availability, experiences and perceived utility of the support received (i.e. via midwifery services, VABM, Birth Companions, friends/personal networks) across the perinatal period (pregnancy, intra-partum and early postnatal period). Recommendations regarding the need for additional support were also explored. A form to record socio-demographic and birth related/outcome data (as detailed in section C.3.1) for all women interviewed was completed by the VABM midwives following the interview (and after consent had been received from the woman). This information was shared with the UCLan team via the Whittington Trust IT email account[25].

The majority of interviews were undertaken by the VABM midwives (HJ/JA). In order to try and minimise bias, there was a proviso that the midwife who undertook the interview had not provided direct care to the woman. In the occasions where both VABM midwives had provided direct support, the interview was undertaken by the Consultant Midwife (LVL). It was originally intended that the interviewees would have given birth during 1st July, 2014–30th June, 2015. This was in order for the women's birth related/outcome data to be included in the whole population sample to be analysed for this study. However, due to resource issues (i.e. time for the VABM midwives to undertake the interviews), and difficulties in recruitment (due to the complexities faced by individual women), an extended time-frame to undertake the interviews was agreed with Birth Companions. The interviews were undertaken over October, 2014 – September, 2015.

A training session in undertaking qualitative interviews was provided to HJ/JA/LVL by the UCLan team prior to data collection. Feedback on early interview transcripts was also provided. The interviews were audio-recorded and transcribed in full for analysis purposes. All interviews took between 20-48 minutes to complete.

All women who took part in an interview received a £10.00 Love to Shop voucher to thank them for their involvement.

C.4. Data analysis

Descriptive and inferential statistics of the socio-demographic and birth related/outcome data were undertaken using SPSS v. 22. Analysis of the interview data was undertaken using Braun & Clark's (2005) thematic framework, supported by MAXQDA qualitative data analysis software. The thematic framework involved: reading and re-reading of the transcripts to enable familiarisation; organising and mapping the data into meaningful groups; re-reading to ensure accuracy and re-organisation and refinement. Key differences were identified across the different participant groups (i.e. those who had received different forms

[24] There was a separate contract between Birth Companions and Whittington Hospital for this data to be collected.

[25] Both Gill Thomson and Marie Clare Balaam had a Whittington IT account set up for this project in order to securely transfer confidential information.

of support) as appropriate. Analysis was also informed by a 'realist approach' (Pawson & Tilley, 1997; Pawson et al, 2004) to explore and identify the key 'mechanisms' and associated contexts in which positive outcomes are achieved (or not as the case may be).

C.5. Ethics approval

Ethics and governance approval was obtained from the NRES Committee North West – Lancaster (14/NW/0353), the Research and Development department at the Whittington Hospital and the Science, Technology, Engineering, Medicine and Health (STEMH) ethics sub-committee at the University of Central Lancashire (project no. 251). Caldicott approval (for sharing personal identifiable information, i.e. socio-demographic and birth related/outcome data) from the Whittington Hospital was also obtained.

Ethical issues of informed consent, confidentiality, voluntary nature of participation and withdrawal were considered at all stages of the research project. In the occasions where an interview was held on the postnatal ward, care was taken to ensure that a private, confidential area was used. All women were also encouraged to access or were directed to additional support, as and when appropriate.

D. Findings

D.1. Socio-demographic and birth related/outcome data

Socio-demographic and birth related/outcome data for the 3,511 women who birthed at the Whittington Hospital during 1st July, 2014 - 30th June, 2015 were collected and analysed for this study. Overall, 315[26] (8.9%) women were identified as 'vulnerable' (i.e. referred into the VABM due to a safeguarding/child protection concern); 24 of which (7.6%) received additional support either through Birth Companions (n=5, 1.6%), the VABM team (n=14, 4.4%) or both Birth Companions and the VABM service (n=5, 1.6%). These data thereby indicate that some 291 (92.3%) of those identified as vulnerable received no additional support from Birth Companions or the VABM team.

[26] It should be noted that this is likely to be an under-representation of women who are referred into the VABM service on a yearly basis. At the Whittington different IT systems are used to record perinatal care (e.g. separate databases are used to record key birth related/outcome data and community midwifery care such as antenatal/postnatal contacts), and do not allow for additional variables to be recorded (such as whether women has been referred into/received support from the VABM or Birth Companions service). The VABM service retains a separate excel database of all women who are referred/supported, however, only basic information such as name, age, hospital record (which is different to the NHS number recorded on the birth related/outcome data), date of referral and type of support received (in terms of whether they were referred to Birth Companions, case-loaded by the VABM midwives, whether the VABM provided support on a liaison basis only, etc.) are retained. As the woman's name was the key denominator across these two recording systems (i.e. hospital IT system and VABM databases), difficulties in marrying up individual women across these systems were reported. This issue could be due to women having/using a different name (i.e. due to marriage or divorce) on their main hospital records, an early infant death or the woman moved location and gave birth in a different hospital (with transiency often associated with those who have high complex needs). Furthermore, due to high levels of repetition across the VABM recording system, it was difficult to determine the actual number of women who had been referred into the VABM service over the 12 month period. A further layer of complexity that warrants reference here is that the VABM service is unaware of all the women who birth at the Whittingham that have received support from Birth Companions (such as women who receive support while still in prison and those who self-refer). This is reflected in the findings that 14 women who gave birth at the Whittington Hospital received support from Birth Companions, but only 10 were known/recorded by the VABM team on the birth related/outcome data used for this study.

While reasons for referral into the VABM service have not been individually reported, the range of issues included: mental health issues/mental health disorders (e.g. personality disorder), young parent, lack of social support, late booker/non-attendance at midwifery appointments, sex offender, substance, alcohol or drug misuse, social work involvement such as child protection issues, previous/current domestic violence, learning/physical disabilities, housing issues/homeless, ex-prisoner/living with a known criminal, trafficked/immigration status/asylum seeker, financial issues, care-leaver, previous bereavement (i.e. still-born), behavioural issues (i.e. bonding/attachment with infant) and breast cancer.

In the following sections analyses of the socio-demographic and birth related/outcome data are reported. These analyses were undertaken to make comparisons between:

c) *Vulnerable versus non-vulnerable:* Comparisons between women identified as 'vulnerable' (a referral into the VABM team) (n=315) and those who were non-vulnerable (no referral made) (n=3,196).
d) *Vulnerable only:* Comparisons were undertaken between the 'vulnerable only' sub-sample. This included comparisons between the vulnerable women (n=315) who were either: i) case-loaded by Birth Companions (n=10) (including those who were case-loaded by Birth Companions (n=5) and those who also received additional support from the VABM service (n=5)); b) case-loaded by the VABM service (n=14); or c) referred into the VABM service only (n=291)[27].

Descriptive and inferential statistical analyses were undertaken when drawing comparisons between the vulnerable versus non-vulnerable population group. Independent samples t-tests were performed on the continuous variables (i.e. age, length of hospital stay, birth weight, gestational age at booking and gestational age at birth). Chi-square tests for association between dependent and independent variables were used for other nominal/categorical variables. Descriptive analyses only were undertaken when reporting on comparisons in the 'vulnerable only' sub-sample. This was due to the very small sample sub-cell counts in contingency tables which would render the inferential statistics misleading and open to misinterpretation. In each of the following sections, tables that present data on the 'vulnerable versus non-vulnerable' and 'vulnerable only' samples are presented, followed by a summary of key comparative insights.

[27] Although should be noted as indicated in a description of the VABM service (section B.3), these women were likely to have had a 'meet and greet' session with the VABM midwives, additional support provided via care plans created/planned with the wider midwifery team, and may also have included a referral into the Perinatal Mental Health team.

D.1.1 Socio-demographic data

D.1.1.1 Age

Table 1: Age - Vulnerable v. non-vulnerable

Age (years)	Vulnerable	Non-Vulnerable	Total
	Mean=31.4 (SD=6.4)	*Mean=32.6 (SD=5.4)*	*Mean=32.5 (SD=5.5)*
16 to 19	6 1.9%	40 1.3%	46 1.3%
20 to 24	53 16.8%	270 8.4%	323 9.2%
25 to 29	78 24.8%	654 20.5%	732 20.8%
30 to 34	76 24.1%	1091 34.1%	1167 33.2%
35 to 39	70 22.2%	901 28.2%	971 27.7%
40+	32 10.2%	240 7.5%	272 7.7%
Total	**315 100.0%**	**3196 100.0%**	**3511 100.0%**

Table 2: Age - Vulnerable only

Age (years)	Referred to VABM only	Case-loaded by Birth Companions	Case-loaded by VABM	Total
	Mean=31.5 (SD=6.4)	*Mean=33.4 (SD=6.6)*	*Mean=28 (SD=5)*	*Mean=31.4 (SD=6.4)*
16 to 19	6 2.1%	0 0.0%	0 0.0%	6 1.9%
20 to 24	48 16.5%	1 10.0%	4 28.6%	53 16.8%
25 to 29	70 24.1%	2 20.0%	6 42.9%	78 24.8%
30 to 34	71 24.4%	3 30.0%	2 14.3%	76 24.1%
35 to 39	66 22.7%	2 20.0%	2 14.3%	70 22.2%
40+	30 10.3%	2 20.0%	0 0.0%	32 10.2%
Total	**291 100.0%**	**10 100.0%**	**14 100.0%**	**315 100.0%**

Data in Table 1 highlights a higher percentage of vulnerable women aged 24 years or under (18.7%) compared to the non-vulnerable sample (9.7%). An independent samples t-test also reported a significant difference between the groups, which suggests that vulnerable women were younger (mean=31.4) than non-vulnerable women (mean=32.6) (p=0.001).

Analysis of the 'vulnerable only' sub-sample (Table 2) revealed that women case-loaded by Birth Companions tended to be older; with 70% of those supported by Birth Companions being 30+ years, and 71.4% of women case-loaded by the VABM team being under 29 years or age.

D.1.1.2. Ethnicity

Table 3: Ethnicity - Vulnerable v. non-vulnerable

Ethnic group	Vulnerable	Non-Vulnerable	Total
White	171 54.3%	2010 62.9%	2181 62.1%
Asian / Asian British	22 7.0%	292 9.1%	314 8.9%
Black / African / Caribbean / Black British	73 23.2%	445 13.9%	518 14.8%
Mixed / multiple ethnic groups	13 4.1%	87 2.7%	100 2.8%
Other ethnic group	28 8.9%	220 6.9%	248 7.1%
Not recorded	8 2.5%	142 4.4%	150 4.3%
Total	**315** **100.0%**	**3196** **100.0%**	**3511** **100.0%**

Table 4: Ethnicity – Vulnerable only

Ethnic group	Referred to VABM Only	Case-loaded by Birth Companions	Case-loaded by VABM	Total
White	155 53.3%	6 60.0%	10 71.4%	171 54.3%
Asian / Asian British	22 7.6%	0 0.0%	0 0.0%	22 7.0%
Black / African / Caribbean / Black British	69 23.7%	1 10.0%	3 21.4%	73 23.2%
Mixed / multiple ethnic groups	11 3.8%	1 10.0%	1 7.1%	13 4.1%
Other ethnic group	26 8.9%	2 20.0%	0 0.0%	28 8.9%
Not recorded	8 2.7%	0 0.0%	0 0.0%	8 2.5%
Total	**291** **100.0%**	**10** **100.0%**	**14** **100.0%**	**315** **100.0%**

Overall a higher proportion of women (vulnerable and non-vulnerable) were from a White ethnic background (Table 3). A chi-square test revealed a significant relationship, with a higher percentage of non-vulnerable women being White (65.8%) compared to vulnerable women (55.7%) and a higher percentage of vulnerable women being from a BME ('Black', 'Mixed' or 'Other') ethnicity group compared to non-vulnerable women (44.3% v. 34.2% respectively; $p<0.001$, chi-square test)[28]. Comparisons within the 'vulnerable only' sub-sample indicates that women who did receive additional support (from Birth Companions and/or the VABM team) (Table 4) were more likely to be from a White ethnic group (66.7%); however Birth Companions provided support to a higher number of women from a BME background (40%) compared to those who received support from the VABM service only (28.6%).

D.1.1.3 Number of previous pregnancies[29]

Table 5: Number of previous pregnancies – Vulnerable v. non-Vulnerable

Number of previous pregnancies	Vulnerable	Non-Vulnerable	Total
0	93 29.5%	1102 34.5%	1195 34.1%
1-2	117 37.1%	1490 46.7%	1607 45.8%
3-4	69 21.9%	419 13.1%	488 13.9%
5+	36 11.4%	181 5.7%	217 6.2%
Total	**315 100.0%**	**3192 100.0%**	**3507 100.0%**

Table 6: Number of previous pregnancies – Vulnerable only

Number of previous pregnancies	Referred to VABM Only	Case-loaded by Birth Companions	Case-loaded by VABM	Total
0	88 30.2%	3 30.0%	2 14.3%	93 29.5%
1-2	108 37.1%	4 40.0%	5 35.7%	117 37.1%
3-4	63 21.6%	1 10.0%	5 35.7%	69 21.9%
5+	32 10.9%	2 20.%	2 14.3%	36 10.3%
Total	**291 100.0%**	**10 10.0%**	**14 100.0%**	**351 100.0%**

[28] A 2X2 contingency table was computed to assess the relationship between ethnicity (White v. BME) and vulnerability status (vulnerable v. non-vulnerable); those who were 'not recorded' were removed from the analysis.

[29] In the hospital IT data, the number of live births as well as previous pregnancies was recorded. Unfortunately due to a high number of anomalies, accurate data to elicit how many live births the women had previously had was unable to be calculated.

Overall women (vulnerable and non-vulnerable) were more likely to have had between 0-2 previous pregnancies (Table 5). A significantly higher percentage of non-vulnerable women had 1-2 previous pregnancies compared to vulnerable women (46.7% v. 37.1% respectively) and a higher percentage of vulnerable women had 3-4 previous pregnancies compared to non-vulnerable women (21.9% v. 13.1% respectively) ($p<0.001$, chi-square test). Further exploration of the vulnerable women only sub-sample (Table 6) suggests that Birth Companions provided support to those who had had fewer previous pregnancies (70%, had 2 or less previous pregnancies) when compared to those supported by the VABM service only(50% had 3 or more previous pregnancies).

D.1.1.4. Gestational age at booking appointment

Table 7: Gestational age - Vulnerable v. non-vulnerable

Gestational age at booking (weeks)	**Vulnerable**	**Non-Vulnerable**	**Total**
	Mean =14.5 (SD=7.6)	*Mean = 13 (SD=6.3)*	*Mean =13.1 (SD=6.4)*
10 and under	126 40.0%	1385 43.3%	1511 43.0%
11 to 15	105 33.3%	1368 42.8%	1473 42.0%
16 to 20	38 12.1%	142 4.4%	180 5.1%
21 to 25	13 4.1%	83 2.6%	96 2.7%
26 to 29	12 3.8%	56 1.8%	68 1.9%
30 to 35	13 4.1%	108 3.4%	121 3.4%
36 and over	8 2.5%	54 1.7%	62 1.8%
Total	**315 100.0%**	**3196 100.0%**	**3511 100.0%**

Table 8: Gestational age - Vulnerable only

Gestational age at booking (weeks)	Referred to VABM only	Case-loaded by Birth Companions	Case-loaded by VABM	Total
	Mean=14.1 (SD=7.4)	*Mean = 18.6 (SD=7.9)*	*Mean =19.2 (SD=8.5)*	*Mean = 14.5 (SD=7.6)*
10 and under	122 41.9%	1 10.0%	3 21.4%	126 40.0%
11 to 15	99 34.0%	3 30.0%	3 21.4%	105 33.3%
16 to 20	34 11.7%	3 30.0%	1 7.1%	38 12.1%
21 to 25	9 3.1%	2 20.0%	2 14.3%	13 4.1%
26 to 29	8 2.7%	0 0.0%	4 28.6%	12 3.8%
30 to 35	11 3.8%	1 10.0%	1 7.1%	13 4.1%
36 and over	8 2.7%	0 0.0%	0 0.0%	8 2.5%
Total	**291 100.0%**	**10 100.0%**	**14 100.0%**	**315 100.0%**

Data detailed in Table 7 reflects similar insights to the wider literature in that women who face complex psychosocial issues were more likely to book their pregnancy late, with 73.3% of the vulnerable women, compared to 85.9% of non-vulnerable women attending a booking appointment within 15 weeks of their pregnancy (Table 7). An independent samples t-test revealed a significant difference in that vulnerable women attended a booking appointment later in their pregnancy when compared to non-vulnerable women (mean=14.5 weeks v. mean=13.0 weeks respectively, p=0.001).

Analysis of the vulnerable only sub-sample (Table 8) shows that a higher percentage of women who were referred into the VABM team only (41.9%) attended a booking appointment with a midwife at 10 gestational weeks and under, compared to those who were case-loaded by Birth Companions and/or the VABM team (16.7%). A higher percentage of women who received additional support were very 'late bookers' (i.e. attended a booking appointment at 26+ gestational weeks) compared to those who did not receive this additional support (25% v. 9.2% respectively).

D.1.1.5. Smoking status

Table 9: Smoking status at booking - Vulnerable v. Non-Vulnerable

Smoking status	Vulnerable	Non-Vulnerable	Total
Current smoker	58 18.4%	87 2.7%	145 4.1%
Ex-smoker	7 2.2%	25 0.8%	32 0.9%
Ex-smoker - stopped after conception	36 11.4%	202 6.3%	238 6.8%
Ex-smoker - stopped between conception and 12 months prior	9 2.9%	143 4.5%	152 4.3%
Ex-smoker - stopped more than 12 months before conception	20 6.3%	228 7.1%	248 7.1%
Never smoked	166 52.7%	2339 73.2%	2505 71.3%
Non-smoker - history unknown	3 1.0%	6 0.2%	9 0.3%
Unknown	16 5.1%	166 5.2%	182 5.2%
Total	**315** **100.0%**	**3196** **100.0%**	**3511** **100.0%**

Table 10: Smoking status at booking – Vulnerable only

Smoking Status	Referred to VABM only	Case-loaded by Birth Companions	Case-loaded by VABM	Total
Current smoker	43 14.8%	4 40.0%	11 78.6%	58 18.4%
Ex-smoker	7 2.4%	0 0.0%	0 0.0%	7 2.2%
Ex-smoker - stopped after conception	35 12.0%	0 0.0%	1 7.1%	36 11.4%
Ex-smoker - stopped between conception and 12 months prior	9 3.1%	0 0.0%	0 0.0%	9 2.9%
Ex-smoker - stopped more than 12 months before conception	19 6.5%	1 10.0%	0 0.0%	20 6.3%
Never smoked	162 55.7%	3 30.0%	1 7.1%	166 52.7%
Non-smoker - history unknown	2 0.7%	1 10.0%	0 0.0%	3 1.0%
Unknown	14 4.8%	1 10.0%	1 7.1%	16 5.1%
Total	**291** **100.0%**	**10** **100.0%**	**14** **100.0%**	**315** **100.0%**

A significantly higher percentage of vulnerable women were current/previous smokers compared to those who were non-vulnerable (43.5% v. 22.6%; p<0.001 chi-square test)[30]. Although it is interesting to note from the breakdown presented in Table 9 that a higher percentage of vulnerable women stopped after their pregnancy was confirmed (11.4%) compared to the non-vulnerable group (6.3%), which may indicate the benefits of targeted smoking cessation interventions. Comparisons within the vulnerable only sub-sample (Table 10) revealed that a higher percentage of women who smoke received support from Birth Companions and/or the VABM service (62.5%) compared to those who were referred only (14.8%).

D.1.2. Birth related/outcome data

D.1.2.1. Labour onset

Table 11: Labour onset - Vulnerable v. non-vulnerable

Type of induction	Vulnerable	Non-Vulnerable	Total
Medical and surgical induction	15 4.8%	103 3.2%	118 3.4%
Medical induction	57 18.1%	611 19.1%	668 19.0%
No labour (caesarean section)	59 18.7%	494 15.5%	553 15.8%
Spontaneous	163 51.7%	1876 58.7%	2039 58.1%
Surgical induction	21 6.7%	112 3.5%	133 3.8%
Total	**315 100.0%**	**3196 100.0%**	**3511 100.0%**

Table 12: Labour onset – Vulnerable only

Type of Induction	Referred to VABM only	Case-loaded by Birth Companions	Case-loaded by VABM	Total
Medical and surgical induction	15 5.2%	0 0.0%	0 0.0%	15 4.8%
Medical induction	53 18.2%	1 10.0%	3 21.4%	57 18.1%
No labour (caesarean section)	56 19.2%	1 10.0%	2 14.3%	59 18.7%
Spontaneous	148 50.9%	7 70.0%	8 57.1%	163 51.7%
Surgical induction	19 6.5%	1 10.0%	1 7.1%	21 6.7%
Total	**291 100.0%**	**10 100.0%**	**14 100.0%**	**315 100.0%**

[30] Cases where data was unknown were removed and associations between those who current/previously smoked versus non-smokers between the two groups (vulnerable v. non-vulnerable women) was undertaken.

The induction rates were similar across the two groups (Table 11), with a slightly higher percentage of non-vulnerable women having had a spontaneous delivery when compared to vulnerable women (69.4% v. 63.7% respectively; p=0.057, chi-square test).

When comparing frequencies within the vulnerable only sub-sample (Table 12), a higher percentage of women who received support (from Birth Companions and/or the VABM service) were more likely to have a spontaneous delivery (62.5%), compared to those who were referred only (50.9%); with this difference being more marked among those who received support from the Birth Companions (70.0%) when compared to those who received support from the VABM service only (57.1%).

D.1.2.2. Anaesthesia at delivery

Table 13: Anaesthesia at delivery - Vulnerable v. non-vulnerable

Type of anaesthesia	Vulnerable	Non-Vulnerable	Total
Epidural	120 38.1%	1098 34.4%	1218 34.7%
Epidural and spinal	32 10.2%	291 9.1%	323 9.2%
General anaesthetic	8 2.5%	26 0.8%	34 1.0%
General anaesthetic and epidural	2 0.6%	8 0.3%	10 0.3%
General anaesthetic and spinal	0 0.0%	5 0.2%	5 0.1%
None	114 36.2%	1291 40.4%	1405 40.0%
Other (including pudendal block)	9 2.9%	132 4.1%	141 4.0%
Spinal	30 9.5%	345 10.8%	375 10.7%
Total	**315** **100.0%**	**3196** **100.0%**	**3511** **100.0%**

Table 14: Type of anaesthesia at delivery – Vulnerable only

Type of anaesthesia	Referred to VABM only	Case-loaded by Birth Companions	Case-loaded by VABM	Total
Epidural	111 38.1%	2 20.0%	7 50.0%	120 38.1%
Epidural and spinal	30 10.3%	1 10.0%	1 7.1%	32 10.2%
GA	7 2.4%	0 0.0%	1 7.1%	8 2.5%
GA and epidural	2 0.7%	0 0.0%	0 0.0%	2 0.6%
None	103 35.4%	7 70.0%	4 28.6%	114 36.2%
Other (including pudendal block)	9 3.1%	0 0.0%	0 0.0%	9 2.9%
Spinal	29 10.0%	0 0.0%	1 7.1%	30 9.5%
Total	**291** **100.0%**	**10** **100.0%**	**14** **100.0%**	**315** **100.0%**

Overall a slightly higher percentage of vulnerable women used anaesthesia during delivery when compared to the non-vulnerable sample (63.8% v. 59.6% respectively; p=0.146, chi-square test). However, analysis of the vulnerable only sub-sample (Table 14) indicates that a higher percentage of women who received support (either from Birth Companions and/or the VABM team) were less likely to have used anaesthesia (45.8%) compared to those who were referred only (35.4%); with this difference being more apparent amongst those who received support from Birth Companions (70%) compared to those who received support from the VABM team only (28.6%).

D.1.2.3. Medication used[31]

Table 15: Medication used - Vulnerable v. non-vulnerable

Medication used	Vulnerable	Non-Vulnerable	Total
Yes	185 58.7%	1968 61.6%	2153 61.3%
No	130 41.3%	1228 38.4%	1358 38.7%
Total	**315** **100.0%**	**3196** **100.0%**	**3511** **100.0%**

[31] Due to the extensive number of variations recorded in the IT systems, this was recorded as either yes (for any form of medication use) or no.

Table 16: Medication used - Vulnerable only

Medication used	Referred to VABM only	Case-loaded by Birth Companions	Case-loaded by VABM	Total
Yes	168 57.7%	8 80.0%	9 64.3%	185 58.7%
No	123 42.3%	2 20.0%	5 35.7%	130 41.3%
Total	**291** **100.0%**	**10** **100.0%**	**14** **100.0%**	**315** **100.0%**

Data presented in Table 15 reveals that medication use during labour was used by a very slightly higher percentage of women who were non-vulnerable compared to those who were vulnerable (61.6% v. 58.7%; p=0.322, chi-square test). However, comparisons within the vulnerable only sub-sample (Table 16) revealed a different pattern, in that a higher percentage of women who received support (from Birth Companions and/or the VAMB service) were more likely to use medication compared to those who were referred only (70.8% v. 57.7% respectively).

D.1.2.4. Episiotomy performed

Table 17: Episiotomy performed - Vulnerable v. non-vulnerable

Episiotomy performed	Vulnerable	Non-Vulnerable	Total
Yes[1]	53 16.8%	655 20.5%	708 20.2%
No	164 52.1%	1705 53.3%	1869 53.2%
Not applicable (caesarean)	98 31.1%	836 26.2%	934 26.6%
Total	**315** **100.0%**	**3196** **100.0%**	**3511** **100.0%**

[1]right/medio lateral or midline

Table 18: Episiotomy performed – Vulnerable only

Episiotomy performed	Referred to VABM only	Case-loaded by Birth Companions	Case-loaded by VABM	Total
Yes[1]	48 16.5%	2 20.0%	3 21.4%	53 16.8%
No	150 51.5%	7 70.0%	7 50.0%	164 52.1%
Not applicable (caesarean)	93 32.0%	1 10.0%	4 28.6%	98 31.1%
Total	**291** **100.0%**	**10** **100.0%**	**14** **100.0%**	**315** **100.0%**

[1]right/medio lateral or midline

Overall a higher percentage of non-vulnerable women had an episiotomy performed (20.5%) compared to those who were vulnerable (16.8%) (Table 17). However, when the 'not applicable' cases (due to having a caesarean section) were removed, the rates between the groups was comparable (24.4% vulnerable population v. 27.8% non-vulnerable population; p=0.293, chi-square test).

Similar patterns emerged when comparing data for the vulnerable only sub-sample (Table 18). While a higher percentage of women who received support had had an episiotomy, when those who were 'not-applicable' were removed, the episiotomy rates between those who had and had not received additional support were very similar (26.3% v. 24.2% respectively).

D.1.2.5. Perineal tears

Table 19: Degree of perineal tear - Vulnerable v. non-vulnerable

Degree of tear	Vulnerable	Non-Vulnerable	Total
Grade 1 tear	31 9.8%	333 10.4%	364 10.4%
Grade 2 tear	65 20.6%	893 27.9%	958 27.3%
Grade 3[1] tear	3 1.0%	77 2.4%	80 2.3%
Grade 4 tear	1 0.3%	2 0.1%	3 0.1%
Severe perineal tear	1 0.3%	2 0.1%	3 0.1%
None	112 35.6%	985 30.8%	1097 31.2%
Not applicable (caesarean section)	102 32.4%	904 28.3%	1006 28.7%
Total	**315** **100.0%**	**3196** **100.0%**	**3511** **100.0%**

[1]Includes Grade 3a, 3b or 3c tears

Table 20: Degree of perineal tear – Vulnerable only

Degree of tear	Referred to VABM only	Case-loaded by Birth Companions	Case-loaded by VABM	Total
Grade 1 tear	30 10.3%	1 10.0%	0 0.0%	31 9.8%
Grade 2 tear	60 20.6%	2 20.0%	3 21.4%	65 20.6%
Grade 3[1] tear	3 1.0%	0 0.0%	0 0.0%	3 1.0%
Grade 4 tear	1 0.3%	0 0.0%	0 0.0%	1 0.3%
Severe perineal tear	1 0.3%	0 0.0%	1 0.3%	1 0.3%
None	99 34.0%	6 60.0%	7 50.0%	112 35.6%
Not applicable (caesarean section)	97 33.3%	1 10.0%	4 28.6%	102 32.4%
Total	**315** **100.0%**	**10** **100.0%**	**14** **100.0%**	**315** **100.0%**

[1]Includes Grade 3a, 3b or 3c tears

From the data presented in Table 19 it appears that among those who had a perineal tear, a Grade 2 tear was a more likely occurrence. A chi-square test also revealed a significant relationship in that non-vulnerable women were more likely to experience a perineal tear compared to those who were vulnerable (57.0% % v. 47.4% respectively; p=0.007, chi-square test[32]). When comparing the frequencies within the vulnerable only sub-sample (Table 20) a higher percentage of women who received support (from Birth Companions and/or the VABM team) did not experience a perineal tear (68.4%) compared to those who were referred only (51.0%).

[32] Those who were not applicable due to having a caesarean section were removed from the analysis, and comparisons between vulnerable v. non-vulnerable women who did and did not have an episiotomy was undertaken.

D.1.2.6. Route of delivery

Table 21: Route of delivery - Vulnerable v. non-vulnerable

Route of delivery at labour	Vulnerable	Non-Vulnerable	Total
Both vaginal and caesarean	0 0.0%	1 0.0%	1 0.0%
Caesarean	102 32.4%	904 28.3%	1006 28.7%
Vaginal	213 67.6%	2291 71.7%	2504 71.3%
Total	**315** **100.0%**	**3196** **100.0%**	**3511** **100.0%**

Table 22: Route of delivery – Vulnerable only

Route of delivery at labour	Referred to VABM only	Case-loaded by Birth Companions	Case-loaded by VABM	Total
Caesarean	97 33.3%	1 10.0%	4 28.6%	102 32.4%
Vaginal	194 66.7%	9 90.0%	10 71.4%	213 67.6%
Total	**291** **100.0%**	**10** **100.0%**	**14** **100.0%**	**315** **100.0%**

While a slightly higher percentage of vulnerable (32.4%) compared to non-vulnerable women (28.3%) had a caesarean section, the chi-square test was non-significant (p=0.126). However, the data presented in Table 22, indicates that a higher percentage of vulnerable women who received support (in particular among those received support from Birth Companions) were more likely to have a vaginal birth (79.2%) compared to those who were referred only (66.7%).

D.1.2.7 Outcome of delivery

Table 23: Outcome of delivery - Vulnerable v. non-vulnerable

Outcome of delivery	Vulnerable	Non-Vulnerable	Total
Live birth	312 99.0%	3175 99.3%	3487 99.3%
Stillbirth	3 1.0%	20 0.6%	23 0.7%
Both live birth and stillbirth	0 0.0%	1 0.0%	1 0.0%
Total	**315** **100.0%**	**3196** **100.0%**	**3511** **100.0%**

Table 24: Outcome of delivery – Vulnerable only

Outcome of delivery	Referred to VABM Only	Case-loaded by Birth Companions	Case-loaded by VABM	Total
Live birth	288 99.0%	10 100.0%	14 100.0%	312 99.0%
Stillbirth	3 1.0%	0 0.0%	0 0.0%	3 1.0%
Total	**291** **100.0%**	**10** **100.0%**	**14** **100.0%**	**315** **100.0%**

Data presented in Table 23 and 24 supports the wider literature in that the stillbirth rate was higher within a vulnerable population group. However, due to the low cell count (and violation of assumptions) a chi-square test was not performed.

D.1.2.8. Length of hospital stay

Table 25: Length of stay - Vulnerable v. non-vulnerable

Length of hospital stay (days)	Vulnerable	Non-Vulnerable	Total
	Mean=4.2 (SD=4.9)	*Mean=2.7 (SD=2.7)*	*Mean=2.9 (SD=3)*
0	12 3.9%	200 6.3%	212 6.1%
1-3	175 56.3%	2182 68.9%	2357 67.8%
4-6	75 24.1%	580 18.3%	655 18.8%
7+	49 15.8%	203 6.4%	252 7.2%
Total	**311** **100.0%**	**3165** **100.0%**	**3476** **100.0%**

Table 26: Length of stay – Vulnerable only

Length of hospital stay (days)	Referred to VABM only	Case-loaded by Birth Companions	Case-loaded by VABM	Total
	Mean=3.8 (SD=4)	*Mean=11.5 (SD=14.3)*	*Mean=6.3 (SD=4.7)*	*Mean=4.2 (SD=4.9)*
0	12 4.2%	0 0.0%	0 0.0%	12 3.9%
1-3	167 58.2%	3 30.0%	5 35.7%	175 56.3%
4-6	70 24.4%	1 10.0%	4 28.6%	75 24.1%
7+	38 13.2%	6 60.0%	5 35.7%	49 15.8%
Total	**287 100.0%**	**10 100.0%**	**14 100.0%**	**311 100.0%**

When comparing the vulnerable v. non-vulnerable sample (Table 25), a higher percentage of vulnerable women stayed in hospital for a protracted period of time; with 39.9% of vulnerable women compared to 24.7% of non-vulnerable women staying on the postnatal ward for 4+ days. An independent samples t-test revealed a significant difference between the groups which suggests that vulnerable women stay on the postnatal ward for a longer time period than non-vulnerable women (mean=4.2 days v. mean=2.7 days respectively; $p<0.001$).

Analysis of the vulnerable only sub-sample (Table 26) revealed that a higher percentage of women who were case-loaded by Birth Companions and/or the VABM service had a longer stay in hospital compared to those who were referred only; 70% of women case-loaded by Birth Companions and 64.3% of women case-loaded by the VABM service stayed for 4+ days, compared to 37.6% of those who were referred only. The means also indicated that the women who received support from Birth Companions had a longer hospital stay (mean=11.5 days) than those supported by the VABM service only (mean=6.3 days).

D.1.2.9. Gestational age at birth[33]

Table 27: Gestational age at birth - Vulnerable v. non-vulnerable

Gestational age at birth	Vulnerable	Non-Vulnerable	Total
	Mean=39 (SD=2)	*Mean=39.5 (SD=2.1)*	*Mean=39.4 (SD=2.1)*
27 weeks and under	2 0.6%	12 0.4%	14 0.4%
28 to 31 weeks	1 0.3%	24 0.8%	25 0.7%
32 to 36 weeks	25 7.9%	183 5.7%	208 5.9%
Over 37 weeks	287 91.1%	2977 93.1%	3264 93.0%
Total	**315 100.0%**	**3196 100.0%**	**3511 100.0%**

Table 28: Gestational age at birth – Vulnerable only

Gestational age at birth	Referred to VABM only	Case-loaded by Birth Companions	Case-loaded by VABM	Total
	Mean=39 (SD=2)	*Mean=38.8 (SD=1.8)*	*Mean=38.9 (SD=1.3)*	*Mean=39 (SD=2)*
27 weeks and under	2 0.7%	0 0.0%	0 0.0%	2 0.6%
28 to 31 weeks	1 0.3%	0 0.0%	0 0.0%	1 0.3%
32 to 36 weeks	23 7.9%	1 10.0%	1 7.1%	25 7.9%
Over 37 weeks	265 91.1%	9 90.0%	13 92.9%	287 91.1%
Total	**291 100.0%**	**10 100.0%**	**14 100.0%**	**315 100.0%**

The data reported above (Table 27) highlights very few instances of infants being born at a low gestational age (<28 weeks), with this rate being slightly higher in the vulnerable women group. The percentage of vulnerable women who had a preterm birth (<37 weeks) was also slightly higher when compared to the non-vulnerable sample (8.8% v. 6.9% respectively). An independent samples t-test was significant in that infants born to vulnerable women (mean=39.0 weeks) tend to be born at an earlier gestational age than infants born to non-vulnerable women (mean=39.5 weeks) ($p<0.001$).

Comparisons within the vulnerable only sub-sample (Table 28) revealed that women who do (from Birth Companions and/or the VABM team) and do not (referral only) receive additional support were more likely to have an infant born at 37+ week's gestation.

[33] Categorisation was undertaken to classify extremely low gestational age neonates (<28 weeks), very preterm birth <32 weeks, a late pre-term birth <37 weeks and 'normal range (37-42 weeks)

D.1.2.10 Infant's birth weight

Table 29: Birth weight - Vulnerable v. non-vulnerable

Birth weight (kg)	Vulnerable	Non-Vulnerable	Total
	Mean=3.2 (SD=0.5)	*Mean=3.3 (SD=0.5)*	*Mean=3.3 (SD=0.5)*
Under 1.0	1 0.3%	8 0.3%	9 0.3%
1.0 to 1.5	2 0.6%	19 0.6%	21 0.6%
1.5 to 2.5	33 10.5%	159 5.0%	192 5.5%
2.5 and over	279 88.6%	3009 94.2%	3288 93.7%
Total	**315 100.0%**	**3195 100.0%**	**3510 100.0%**

Table 30: Birth weight – Vulnerable only

Birth weight (kg)	Referred to VABM Only	Case-loaded by Birth Companions	Case-loaded by VABM	Total
	Mean=3.2 (SD=0.5)	*Mean=3.1 (SD=0.6)*	*Mean=3 (SD=0.5)*	*Mean=3.2 (SD=0.5)*
Under 1.0	1 0.3%	0 0.0%	0 0.0%	1 0.3%
1.0 to 1.5	2 0.7%	0 0.0%	0 0.0%	2 0.6%
1.5 to 2.5	28 9.6%	2 20.0%	3 21.4%	33 10.5%
2.5 and over	260 89.3%	8 80.0%	11 78.6%	279 88.6%
Total	**291 100.0%**	**10 100.0%**	**14 100.0%**	**315 100.0%**

A 'normal' infant's birth weight is estimated at 2.5kgs. The data presented in Table 29 highlights that a higher percentage of infants born to a vulnerable mother (11.4%) had a low birth weight (under 2.5 kgs) when compared to infants born to non-vulnerable mothers (5.9%). An independent samples t-test also revealed a significant difference between the groups in that infants born to vulnerable mothers had a lower birth weight (mean=3.2) compared to those born to non-vulnerable mothers (mean=3.3) ($p<0.001$). Overall this data concurs with the wider literature in that approximately six in 100 babies have a low birth weight, and also that women with complex needs are more likely to have an infant with a lower birth weight.

Data presented in Table 30 on the vulnerable only sub-sample revealed that a higher percentage of women who received additional support had a low birth weight baby (under 2.5kgs), compared to those who were referred only (10.7% v. 20.8% respectively).

D.1.2.11. Apgar scores (1, 5 and 10 minutes)[34]

Table 31: Apgar scores - Vulnerable v. non-vulnerable

Apgar score	Vulnerable			Non-Vulnerable			Total
	1 m	5 m	10 m	1 m	5 m	10 m	
0 to 3	9 3.0%	0 0.0%	0 0.0%	63 2.0%	5 0.2%	3 0.2%	80 100.0%
4 to 7	27 9.1%	6 2.0%	2 1.4%	314 10.1%	47 1.5%	4 0.3%	400 100.0%
8 and above	262 87.9%	292 98.0%	145 98.6%	2728 87.9%	3046 98.3%	1439 99.5%	7912 100.0%
Total	**298** **100.0%**	**298** **100.0%**	**147** **100.0%**	**3105** **100.0%**	**3098** **100.0%**	**1446** **100.0%**	**8392** **100.0%**

Table 32: Apgar scores – Vulnerable only

Apgar score	Referred to VABM only			Case-loaded by Birth Companions			Case-loaded by VABM			Total
	1 m	5 m	10 m	1 m	5 m	10 m	1 m	5 m	10 m	
0 to 3	7 2.5%	-	-	1 10.0%	-	-	1 7.7%	-	=	8 100.0%
4 to 7	24 8.7%	5 1.8%	2 1.5%	1 10.0%	0 0.0%	0 0.0%	2 15.4%	1 7.7%	0 0.0%	32 100%
8+	244 88.7%	270 98.2%	135 98.5%	8 80.0%	10 100.0%	5 100.0%	10 76.9%	12 92.3%	5 100.0%	672 100.0%
Total	**275** **100.0%**	**275** **100.0%**	**137** **100.0%**	**10** **100.0%**	**10** **100.0%**	**5** **100.0%**	**13** **100.0%**	**13** **100.0%**	**5** **100%**	**712** **100.0%**

The Apgar ratings for infants born to vulnerable and non-vulnerable women revealed comparable scores (Table 32); with the vast majority of babies scoring in the 8+ range at all time points. A chi-square test to assess the relationship between Apgar scores at 1 minute between vulnerable and non-vulnerable mothers was non-significant (p=0.458). Due to large amounts of missing data at 5 and 10 minutes, further analysis was not undertaken.

[34] APGAR scores (**A**ppearance, **P**ulse, **G**rimace, **A**ctivity, and **R**espiration) were recorded at 1, 5 and 10 minutes after birth. Usual practice is for the APGAR test to be undertaken at 1 and 5 minutes; it is only if there are concerns about the baby's condition that the test is undertaken at 10 minutes. A baby who scores an 8 or above on the test is generally considered in good health.

D.1.2.12. Infant feeding method (initiation)

Table 33: Infant feeding method - Vulnerable v. non-vulnerable

Infant Feeding Method	Vulnerable	Non-Vulnerable	Total
Artificial	60 19.0%	282 8.8%	342 9.7%
Exclusive breastfeeding	172 54.6%	2256 70.6%	2428 69.2%
Not applicable (stillborn)	3 1.0%	18 0.6%	21 0.6%
Partial Breastfeeding	78 24.8%	629 19.7%	707 20.1%
Not recorded	2 0.6%	11 0.3%	13 0.4%
Total	**315** **100.0%**	**3196** **100.0%**	**3511** **100.0%**

Table 34: Infant feeding method – Vulnerable only

Infant Feeding Method	Referred to VABM only	Case-loaded by Birth Companions	Case-loaded by VABM	Total
Artificial	50 17.2%	3 30.0%	7 50.0%	60 19.0%
Exclusive breastfeeding	162 55.7%	4 40.0%	6 42.9%	172 54.6%
Not applicable (i.e. stillbirth)	3 1.0%	0 0.0%	0 0.0%	3 1.0%
Partial Breastfeeding	75 25.8%	3 30.0%	0 0.0%	78 24.8%
Not recorded	1 0.3%	0 0.0%	1 7.1%	2 0.6%
Total	**291** **100.0%**	**10** **100.0%**	**14** **100.0%**	**315** **100.0%**

Overall, a significantly higher percentage of non-vulnerable women breastfed (exclusively or partially) their infants post birth compared to vulnerable women (91.1% v. 80.6% respectively; $p<0.001$, chi-square test)[35,36].

Further analysis of the 'vulnerable only' population (Table 34) indicates that breastfeeding (exclusive or partial) rates were higher among those who were referred only (81.4%)

[35] Comparisons of the breastfeeding rates with those from the UK wide National Infant Feeding Survey (McAndrew et al, 2012) revealed that the Whittington Hospital has higher than national breastfeeding initiation rates (89.3% v. 81%), particularly amongst non-vulnerable women (91.1% v. 81%).

[36] For the chi-square analysis, a 2X2 contingency table was created to assess for a relationship between infant feeding (exclusive and partial breastfeeding v. artificial milk) and vulnerability status (vulnerable v. non-vulnerable). The not applicable data/and not recorded data was excluded.

compared to those who received support (from Birth Companions and/or the VAMB service) (54.2%). However women who received support from Birth Companions were more likely to breastfeed than those who were supported by the VABM team only (70% v. 42.8%).

D.2. Qualitative Data

Overall 17 women took part in an interview. These included women who were case-loaded by Birth Companions only (n=5), were supported by Birth Companions and the VABM team (n=4), those supported by the VABM service (n=2) and those who were referred to the VABM team only (n=6). The participant characteristics (including socio-demographic and birth related/outcome data) are presented in Table 35. In this section we have included a number of participant quotes to contextualise the issues being raised, and while a pseudonym has been used to protect the women's identity, a code to indicate the type of support they received has been detailed (i.e. BC – Birth Companions, VABM – Vulnerable Adults and Babies Midwifery team) and NS – no additional support).

The reasons the women interviewed had been identified as vulnerable and referred to the VABM service were recorded. All participants had multiple reasons for referral reflecting the complexity of their life situation. The reasons detailed included that the women: were destitute or homeless, had a history of substance use, were socially isolated, attended a booking appointment late in their pregnancy, were victims of domestic abuse, had children in care, had a history of self-harm, were asylum seekers with no recourse to public funds, or that they had mental health issues, including depression, personality disorder, psychosis and ADHD. During the interviews, a number of women explicitly described the adversity, trauma, chaos and fear they had or were currently facing:

> *'Because about for three months I go into my friends in X to have a bath. I've been so sad, I spend all day outside, I sleep in the church with my one, my little one, three years and a half. I've been scared, I'm going to lose my kids……I can't get the door open because the people taking drugs and sleeping in front of the door. I sleep on the floor, in the floor, can you imagine it?* (Gina_BC&VABM)

> *'I could hear like drunken people* [when sleeping on the streets]. *Because I think it was on a weekend and it was, and I could hear like a lot of drunken people. Then just feeling like really dirty and horrible, knowing that, obviously, I was carrying X at the time…..carrying a little person and then out there with god knows what and god knows what sort of weather, it sort of made me feel really dirty. And I was too ashamed for anyone to actually see me like that.'* (Dianna_NS)

> *'I cried it out a lot, mainly when I was in the bath, so my daughter wouldn't see me cry. Because there were times where she did see me cry and then she'd wipe my tears and that really upset me. Everybody expects you to be strong and it isn't easy, especially not through pregnancy, especially if you've had a history with depression. It really isn't easy. But I kept it all in, I thought I was going to explode every time but I managed it.'* (Gabby_NS)

'Because before I moved here six weeks ago, I was living in a room in a house and it was really unsuitable, especially when you've got a baby on the way. And it was making me quite depressed and quite stressed really. I just thought, I don't want to bring up my baby in a room in a shared house, with damp and mould issues and building work going on and all that kind of thing. And then the council said they might help and then they said they couldn't help me. And then I got really stressed about that. So for me that was my main issue. And then I'd had a breast cancer diagnosis in the first month after I found out I was pregnant. So I found out I was pregnant, I think, middle of April, and then about a month later I had a stage one breast cancer diagnosis.' (Karla_BC)

'I never had a mum or dad, they were always in and out of my life, so I was always put in care through very bad domestic, as a child growing up. They didn't look after me properly and my dad was very fisty with his fists towards my mum. So they put me into long term care, which I got out of when I was fifteen. And then had my first child who got, obviously, taken off me because I didn't have the skills, I didn't go to parenting classes, because I was still a child myself.' (Lynne_BC&VABM)

A number of key themes emerged in the analysis of the qualitative data, which resonated with Sarafino's (1998) five category support schema. This schema includes 'emotional support' in terms of the empathy and caring expressed towards the person; 'esteem support' which encompasses positive regard and encouragement; 'instrumental support' in terms of direct assistance of a practical nature; 'informational support' in regard to providing advice, support, suggestions and feedback on progress and 'network support' concerns engagement in wider networks of support. Sarafino's model has previously been used to highlight positive aspects of perinatal care and/or to signify how women want care to be provided (e.g. Dykes et al., 2003; Hall et al., 2007; Schmied et al., 2011).

As the interviews included those who had and had not received additional support, we used Sarafino's model to interpret and synthesise both positive and negative aspects of women's experiences. While these insights can appear conflicting due to the variations in women's accounts, they have been thematised to signify the key aspects of care that made a difference, as well as highlight areas where care and support was lacking. As Sarafino's categories are not mutually exclusive, with issues of informational and instrumental support, and emotional and esteem support often overlapping – the data has been presented in three overarching themes; 'instrumental and informational support', 'emotional and esteem support' and 'network support'.

As reflected in the insights reported above (section D.1.1.4.) the women who were interviewed had often attended a booking appointment at a later point in their pregnancies than is recommended (i.e. within first 12 weeks). Most women who were supported by Birth Companions had their first contact with the service in the antenatal period. However, this was usually relatively late in their pregnancy, e.g. between 5 months pregnant and 8 days prior to birth[37]. Most support from Birth Companions, from the accounts given by the women interviewed, took place in the period immediately before labour, during labour and in the

[37] Although in a number of occasions this was due to the women moving into the area at a late point in their pregnancy.

postnatal period[38]. The women who were case-loaded by the VABM team tended to receive support earlier in their pregnancy (i.e. from three–four months gestation). While the VABM support was primarily provided in the antenatal period only, two mothers also received early postnatal support (while the women and/or their babies were still in hospital).

Table 35: Participant characteristics

	Birth Companions (n=5)	**Birth Companions & VABM (n=4)**	**VABM (n=2)**	**Referred only (n=6)**
Age (years)				
20-24		1 (25.0%)	1 (50.0%)	2 (33.3%)
25-29	3 (60.0%)		1 (50%)	2 (33.3%)
30-34		2 (50.0%)		1 (16.7%)
35-39	1 (20.0%)			
40 +	1 (20.0%)	1 (25.0%)		1 (16.7%)
Ethnic group				
White	2 (40.0%)	4 (100.0%)		4 (66.7%)
Asian/Asian British				1 (16.7%)
Black/African/Caribbean Black British	1 (20.0%)		1 (50.0%)	1 (16.7%)
Mixed/multiple ethnic groups	1 (20.0%)		1 (50.0%)	
Other ethnic group	1 (20.0%)			
Number of previous pregnancies				
0	4 (80.0%)		2 (100.0%)	
1-2	1 (20.0%)	2 (50.0%)		5 (83.3%)
3-4		1 (25.0%)		1 (16.7%)
5+		1 (25.0%)		
Gestational age at booking (weeks)				
10 and under	2 (40.0%)			
11 to 15	1 (20.0%)	1 (25.0%)		3 (50.0%)
16 to 20		3 (75.0%)	1 (50.0%)	
21 to 25				2 (33.3%)
26 to 29				
30-35	1 (20.0%)			
Not recorded	1 (20.0%)		1 (50.0%)	1(16.7%)
Smoking status				
Smoking at time of booking		2 (50.0%)	2 (100.0%)	
Not smoking at time of booking	5 (100.0 %)	2 (50.0%)		6 (100.0%)

[38] This time frame will reflect when a referral was received by Birth Companions.

Type of induction				
Yes	1(20.0%)	1 (25.0%)	1 (50.0%)	2 (33.3%)
No	3 (60.0%)	3 (75.0%)	1 (50.0%)	4 (66.7%)
Not recorded	1 (20.0%)			
Anaesthesia				
Yes	1 (20.0%)		2 (100.0%)	3 (50.0%)
No	4 (80.0%)	4 (100.0%)		3 (50.0%)
Medication used				
Yes	3 (60%)	3 (75%)	2 (100%)	5 (83%)
No	2 (40%)	1 (25%)		1 (17%)
Episiotomy performed				
Yes			1 (50.0%)	
No	2 (40.0%)	4 (100.0%)		5 (83.3%)
Not applicable (caesarean)	1 (20.0%)		1 (50.0%)	1 (16.7%)
Not recorded	2 (40.0%)			
Perineal tear				
Tear	2 (40.0%)			1 (16.7%)
No tear	2 (40.0%)	4 (100.0%)		2 (33.3%)
Not recorded	1 (20.0%)		2 (100.0%)	3 (50.0%)
Route of delivery at labour				
Vaginal	4 (80.0%)	4 (100.0%)	1 (50.0%)	5 (83.3%)
Caesarean	1 (20.0%)		1 (50.0%)	1 (16.7%)
Length of hospital stay (days)				
1-3	1 (20.0%)			2 (33.3%)
4-6	2 (40.0%)		2 (100.0%)	2 (33.3%)
7+	1 (20.0%)	3 (75.0%)		2 (33.3%)
Not known	1 (20.0%)	1 (25.0%)		
Gestational age at birth				
32 to 36 weeks		1 (25%)		
Over 37 weeks	5 (100%)	3 (75%)	2 (100%)	6 (100%)
Birth weight (kg)				
1.5-2.5		1 (25%)		
2.5 and over	5 (100%)	3 (75%)	2 (100%)	6 (100%)
Infant Feeding Method				
Breastfeeding	3 (60.0%)	2 (50.0%)	2 (100.0%)	2 (33.3%)
Mixed feeding		1 (25.0%)		2 (33.3%)
Not breastfeeding		1 (25.0%)		
Not recorded	2 (40.0%)			2 (33.3%)

Instrumental and Informational Support

In the first two sub-themes we highlight the difficulties and issues faced by women who were not provided with support from Birth Companions and/or the VABM service in relation to a 'lack of continuity' of care and how this situation often led to 'not the right support' being provided. The following four sub-themes highlight how women who did receive

additional support were able to access information that helped them to prepare for the birth and becoming a parent; how the care they received was responsive to their needs; how help was provided on an individual and familial basis as well as how the accessible and flexible support provided reassurance and improved women's sense of wellbeing.

Lack of continuity

Some of the women who were not case-loaded by either Birth Companions or the VABM service highlighted a lack of continuity in care providers during the antenatal and intra-partum period:

> *'Too many people, so segmented. There's a different person for every different shift and everything. And the continuity of care, some of the health professionals, some of the midwives, and they always seem to be short staffed. So continuity of care is not very good, very segmented.'* (Fiona_NS)

> *'Yes, sixteen weeks we saw one obstetrician. Twenty four weeks I think, we saw a different obstetrician. So we saw lots of different people. I don't think there was one, until the end of the pregnancy, when X* [midwife] *I saw regularly, there wasn't one kind of professional that was constantly in charge, if you like.*' (Anna_NS)

As Anna had had a number of prior miscarriages, and therefore found the pregnancy to be a *'stressful time'*, she had wanted reassurance to reduce her concern over *'every little twinge and you worry, god, am I losing this baby too? And is this baby going to end up gone as well, is it history repeating itself?'* She also wished that someone who had understood her situation had been present during labour:

> *'There was no major concerns but I just wanted the reassurance. But it's quite scary when a doctor just walks in and starts staring at the paperwork and goes, yes, that's fine and walks off. And you're like, hang on, does that mean that you thought there was a problem? So although I understand, not wanting to worry mums unnecessarily, I think when you've got the machines beeping in your ear and you're worrying because the heartbeat's up and down and up and down, it would be fantastic if midwives there that were delivering could say something to reassure you.'* (Anna_NS)

A lack of continuity and opportunities to build up a relationship with their care provider sometimes meant that women were less willing to make emotional-based disclosures. For example, Gabby reported how she felt unable to disclose her concerns as she felt that this is *'what I feel like everybody expects from me'*:

> *'I didn't elaborate, I didn't explain so much. I just, when they asked me how my emotional state is, I just told them I am a bit depressed and I'm desperate to take antidepressants but I'm trying my best to stay away from them for the baby, yes. I honestly, sometimes I feel like I don't want to let my guard down. I don't want anyone to see that I'm weak, even though I can just sit in a room and cry secretly forever. It's what I feel like everybody expects from me. It just looks like I'm strong and I want to continue looking that way. And I think people expect me to stay that way as well.'* (Gabby_NS)

Anna also referred to how midwifery staff did not always ask the right questions to elicit their background issues:

> *'We were never asked whether we had previous Social Services involvement at the booking appointment. We were asked about our son's health. Was he healthy, does he have any conditions, how was his birth? But we were never asked if there was previous involvement…. so they didn't get involved until thirty six weeks gestation in the end.'* (Anna_NS)

Other women reported that while a relationship had been forged with certain midwives, the fact that they had to engage with a range of care providers created communication issues and difficulties in receiving the *'correct answers'*. Dianna reported:

> *'I didn't have X* [midwife] *for very long, but because, obviously, with her just going through my notes and basically, understanding from one point to the next point, it felt like that she wasn't judging me and that she understood. And X* [midwife] *was brilliant, but I felt that I could have seen her a bit more. Because it felt to me that she was always, well not always, but most of the time she was off, and I'd have like a random midwife that I didn't even know. And it felt like, that if I tried talking to them about something that I was worried or curious about and I wanted to talk to them about it, it felt like I wouldn't be getting the correct answer from them. But if I spoke to X or X* [midwives]*, they'd give me the correct answer, basically. But also, it felt a bit, a little bit weird just talking to a random person that I've never spoke to before and haven't got that proper communication.'* (Dianna_NS)

Although for some, the fact that care was provided by different professionals meant that they could *'get different opinions on things'* or even more positive care. This was reflected in a quote by Shonna:

> *'My first midwife seemed really miserable, which didn't make me seem too excited about me having a baby. She didn't seem excited for me. She just seemed really moany. But my second midwife was amazing and she was really bubbly and happy, and made me feel better that I was even having a baby. So my experience was much better for me when I had that second midwife. I was really happy actually.'* (Shonna_VABM)

Not the 'right' support

Issues related to a lack of continuity and opportunities to form relationships with caregivers were also often played out in women not receiving the right types of support. For example, women who had no additional support were often attended to by different professionals during the birth, which in turn led to *'patchy'* and inconsistent care being provided:

> *'There's always a lot of things that could be better managed, like the scheduling. The way they inform patients of their care, what medications they do. When their discharge is, what they're doing. And when they said they're coming to do it, actually making sure the procedure or treatment gets given or get done. Not like, oh we'll tell you two days in advance, this is your treatment or this is the procedure, and then the following week before it gets done. So maybe I will have been discharged before they get some of these things done and they've forgotten about. And then it happens in the end, when you look at the record books of your treatment, half of its blank and empty because no follow up was ever made to the fact of all the things they said were going to happen while you were in hospital.'* (Fiona_NS)

One of the women who had sciatica and who had wanted an active labour reported:

> *'And a bit more continuity between teams would be good. Because I was on the oxytocin drip, I obviously had to be monitored constantly. Now one midwife said that she wanted to put a catheter in, but when she put it in it was really uncomfortable, so I asked for it to be removed pretty much immediately. She said that I wasn't allowed to be unhooked from the monitors at any stage to go to the bathroom. She'd bring me a bedpan, which I still had to use while the monitors were on. Whereas two of the other midwives, the one that looked after me before her and the one after her, said it was fine to unhook me just for a couple of minutes so I could run to the loo and have a pee and then come back again. So it would have been good had there been that kind of continuity, rather than, that's not right, they shouldn't have let you go. And then the next midwife going, well that's not right, she should have let you go. So it would be good if kind of teams could be quite continuous in what they say. Because I was pretty keen on having an active labour. I understand that I had to be monitored because of the drip, that was fine, but even that couple of minutes break to go to the loo, is good to, because I hadn't had the epidural at that point, it's good to stretch your legs and actually get up. Because I've got sciatica as well, it's good to actually get up for a few minutes and be able to walk to the loo and back, and spares me the* [in]*dignity of having to try and aim in a pan while trying to balance monitors.'* (Anna_NS)

A number of women made very depreciating comments about the midwifery care they had received, with these insights indicating a lack of empathy and compassion:

> *'And they* [midwives] *spend all their time just talking and winding you up and not actually doing anything to improve your wellbeing physically or help you mend or trying to understand you. And a lot of people don't even have a sense of humour, which is kind of wrong, but sometimes it can't be helped. Then they will be justifying it with, oh its professional protocol and guideline. And I'm thinking, no, sometimes they're just safeguarding themselves because they know they don't have a sense of humour, or they know they don't know how to deal with certain things effectively.'* (Fiona_NS)

> *'Maybe she didn't mean to, maybe it was just her personality or the way she spoke. Because anyone can come across as an abrupt person, me myself as well. But I think at an emotional and painful time like that, and the person in front of you needs to be much more understanding and gentle in every, every way. Because the way she was talking to me was, I felt like I needed to apologise to her every second* [due to screaming in labour]*, and I did apologise. But the way she said, don't apologise to me, sounded like she really didn't want my apology, she didn't want anything from me. I begged her to take me to the labour ward.'* (Gabby_NS)

For others, it was a lack of sensitivity and confidentiality that caused discomfort and disappointment:

> *'The professionals are not that patient or very, not careful, that sensitive with the patient confidentiality sometimes. They will just barge in and out of rooms or just peak behind the curtains at will, not knowing what's going on, on the other side, or*

where the other patient is at. And when they announce themselves they do not always announce themselves adequately.' (Fiona_NS)

'I was a bit disappointed by the student nurses here in the paediatric ward with the privacy. Because they came in a few times and just saying out loud, I was, there was my partner's family visiting me, me and baby, and obviously they're Italian. So the student nurse came in and just say, OK hi, I'm your nurse for today and they said, we're coming to give this and this medication to your daughter, which was morphine. She knew that she should have not done that because then I went up to her and said, look, it's really private medication. Usually you don't come to a room, you know, when there's other strangers in the room and say, so I was disappointed by that.' (Sally_VABM)

Other concerns related to how different midwives did not appear to be cognizant of women's needs during the labour, due to midwives being *'busy' 'on the computer'* or a lack of understanding about the woman's condition:

'They was on the computer, you know. It was too busy, you know. I'm telling the truth, it was too busy, the hospital. Oh my God, even upstairs, you know, on the fourth floor, more busy, oh, more busy. They was running, the midwives.' (Mandy_BC)

'The midwives, who dealt with in the first part of my labour weren't as prepared with that kind of situation as others. Like also, pain relief, obviously, I have a higher tolerance for pain relief, so also that wasn't being taken into consideration in the first part of [labour]*and then in the second part they knew more how to deal with a woman that was taking methadone, and so I was taken care off better.'* (Sally_VABM)

A further example concerned how a woman experienced postnatal difficulties when she received contradictory breastfeeding information from the midwives and hospital-based breastfeeding supporters:

'The midwife suggested that because it was taking a while for my milk to come in, she was very hungry, to top her up with a little bit of formula in between feeds, just to make sure that we could both get some rest. The breastfeeding support lady was like, that's wrong, they should have never told you that, you have to breastfeed her.' (Anna_NS)

Preparing for birth and parenting

Several participants discussed how members of the VABM, Birth Companions and on occasion members of the wider maternity staff helped them prepare for childbirth by answering their questions and providing information to meet their particular needs:

'All the midwives, all the obstetricians, everybody made it clear, if I had any questions, they would answer anything and everything.' (Anna_NS)

Specific examples concerned women being provided with support for writing birth plans, *'eating healthy food'*, information about the use of anaesthesia during labour and specialist care of their infant post birth:

'Everything was explained to me prior and right before, you know, what the procedure would be like and what I would have felt and everything. Many checks were being done of like my sensitivity, you know, to see that the anaesthetic was working. And so the support, fully satisfied I would say, especially on the labour ward I would say.' (Mandy_VABM)

'I could ask a lot of questions, especially with end of pregnancy, they [VABM midwives] *showed me where, because I knew that my baby would have had to stay in a special care unit because she would have probably, most likely showed withdrawal symptoms. And so they were really clear about explaining to me how this procedure would have happened, how long we will have to stay in the hospital, if we will have stayed together. I wanted to know if I was able to breastfeed and how the situation would be kept private. And they answered all the questions, they showed me the special care baby unit so yes, I was really well informed before the birth how everything was going to be going, when the time had come.'* (Sally_VABM)

Some of the women also referred to how they had received *'good'* infant feeding information, such as the safe storage of breast milk:

'*They* [Birth Companions] *have printed me off quite a few bits of paper with breastfeeding, how to store your milk and what's safe and what isn't.'* (Kathy_BC&VABM)

Responding to individual needs

Contrary to the insights reported above, those who received support from Birth Companions and/or the VABM team often referred to how they received a range of instrumental/practical based support which met their individual needs. One woman described the *'brilliant'* support she had received from the VABM midwives:

'If I had missed an appointment for my scan, they would reschedule me another one… because they know that I'm not very good at appointments. So they used to reschedule them for me, which X [member of the VABM team] *did, to make sure I never miss my antenatal.'* (Lynne_BC&VABM)

As reflected in the quote above, women valued how the VABM team adapted the antenatal care provision to meet their needs and lifestyle. Whereas those who were not privy to this additional support highlighted how beneficial it would have been:

'I think phone calls as reminders would have been great. I think a couple of hours before the appointment, rather than one day before. I don't remember receiving any appointment reminders. But yes, calls would have been good … maybe a house call would also be good as well. I think it wasn't their fault, it was mine. With all the stuff that was going on in my life, I didn't have time to think about appointments.' (Gabby_NS)

Others described receiving support where they felt able to express their needs and that these were taken into consideration:

'It was all about me and what I wanted and what I needed. It was up to me when I wanted to see them [Birth Companions]*.'* (Louise_BC)

'They [Birth Companions] *come and help me, see me, say, I need something. If I need something, I don't understand, they will help me. Yes, it's really nice.'* (Leah_BC)

Those who were case-loaded by Birth Companions also identified how the support helped them to address some of the practical challenges they faced, including feeding their babies, self-care, attending statutory appointments and managing to get out and about with their children after the birth:

'She [Birth Companion] *sort of helped me a bit with the breastfeeding. And then there was one time she helped me, showed me how to use the baby carrier, which was really helpful.'* (Karla_BC)

'Holding baby for me and I have a shower.' (Emma_BC&VABM)

'They [Birth Companions] *asked me for everything, you need shopping, you need something, you know, they help me. One time I had to go to the social workers, I didn't know, where was the place? You know, I don't know London, the streets, everything, the roads. And one from the Birth Companions, she was here, she said, don't worry, I will take you to this place. She helped me with the pushchair, she was holding the baby, we was going on the bus, you know.'* (Mandy_BC)

'I go with that woman, X [Birth Companions] *I go with her, I'm taking her hand, you know, I've been out with her. And she's saying, she's going to help me for the breastfeeding. It's difficult but it's OK.'* (Emma_BC&VABM)

With positive experiences of practical breastfeeding support from within the hospital-based staff also being reported by some:

'Even my lady with my breastfeeding, she really helped me with the breastfeeding, because I was bleeding a lot, my nipples were cracking and stuff. And she was just there to support me on what to do and how to do it and stuff like that, and get her to latch on properly.' (Shonna_VABM)

'And I asked them they give me bottle milk. The midwife was saying, keep on trying. If you do bottle milk you will stop your milk. That's why I chose to keep on trying.' (Louise_BC)

Support as a new family

An important part of the practical support that women received from Birth Companions was the material items they provided to meet their needs as birthing women and new mothers. These items included breast pumps and infant feeding supplies, phone 'top ups', women's clothes, baby clothes, cots, pushchairs, nappies, money for travel as well as toys for older children. Participants valued these items for their own sake, for example, one woman explained how Birth Companions would;

'Even help provide credit if you didn't have it, but I didn't get to that point. But just in case you went into labour and you didn't have credit, they'd top your phone up for you, so that you could phone.' (Louise_BC)

'The lady [Birth Companion] *bring me £20 because I need to go to Croydon to claim asylum.'* (Rebecca_BC)

Louise described how the volunteers operated to ensure that she had everything they needed, when she needed it:

'They're constantly asking if you've got everything and if I ever need anything, they even offered to bring me some shopping when I first had the baby, in case, do you know, I couldn't go out.' (Louise_BC)

These women often internalised the receipt of these items as evidence of the care and concern that the volunteers felt towards them:

'And Birth Companions were really lovely actually because they asked me if there's anything I needed. And I sort of mentioned, well I'm going to need to get a cot. And they, one of them organised, they came round, one of them brought the cot round. I mean its second hand but it's still really nice, and then they brought me a brand new mattress for the cot, which was really kind.' (Karla_BC)

'She [Birth Companion] *bring me all the stuff for the baby, you know. And I feel so proud I met her, you know, so happy. She bring me everything. She told me, you need, because even I didn't know what you need for one new born baby, you understand? So she came here, she asked me, what do you have? I said, I don't have nothing. She said, OK, don't worry, she said. And she brought pushchair, this, that, clothes, you know, everything. Even this, you know, for the, everything, the toys, everything. It was like one angel, you know, come only for me. They understand when you don't have nothing, it's very hard.'* (Mandy_BC)

The care expressed towards the women was also evident through the volunteers' thoughtful actions and gifts:

'And, although X [Birth Companion] *did come and visit me here within a week or two after I moved. And it was really, she'd baked me a cake and bought me a bunch of flowers, she's really sweet.'* (Karla_BC)

'They bring chocolates and I asked them, I didn't have pyjamas, you know, to stay in the hospital. I had but they were dirty, you know, from my blood, everything. And they bring me chocolates, they bring me card, they bring me new knickers, new pyjamas, yes. It was nice.' (Mandy_BC)

Available and flexible support

Participants case-loaded by the VABM team and in particular Birth Companions repeatedly described how they valued the frequency, flexibility and availability of support provided:

'She [VABM midwife] *gave me her phone number, and said if you have an emergency, call, you've got my number. And if my phone is off, just leave a message and someone will phone me. Thanks so much everyone.'* (Gina_BC&VABM)

A number of the women reported that the Birth Companion would provide repeated visits (during the antenatal and postnatal period), e.g., '*couple of times a week', 'sometimes four times a week'* as well as stay with them for protracted periods of time, e.g. *'two, three hours'*.

Some referred to how Birth Companions were on *'stand by'*, to come *'straight away'* when labour commenced:

> *'If you start in labour or something you feel to yourself, just call that number 24 hours and someone's* [Birth Companion] *going to come straight away to stay with you in hospital.'* (Gina_BC&VABM)

> *'She* [Birth Companion] *told me, when you will be in labour, call us and we will bring, you [to hospital] to support you in there, you know. Maybe one or two, you know, to support with the labour.'* (Mandy_BC)

While some of the women's labour commenced so quickly that they did not have time to alert the Birth Companions, others referred to how the volunteer(s) provided continue presence during the labour and birth:

> *'They stayed with me, the Birth Companions, and I stayed in hospital. Then one left and another one come, so I always had someone with me throughout the whole day and everything.'* (Louise_BC)

Women referred to how volunteers provided regular or daily contacts on the postnatal ward, *'coming to visit me every day'*, as well as repeated interactions when the woman had been discharged home via home visits and text/telephone; with this support being proactively and reactively provided; '*I just call them and they will come and see me, they will help me.'* (Louise_BC). The fact that the volunteer support was readily available provided women with feelings of reassurance and enhanced wellbeing:

> *'I was in contact with them a lot more by phone as well. They use, even just texts to see how I was doing or phone me to make sure everything's alright and I was happy .... I felt reassured that I've always got someone on the end of the phone that will come and see me.'* (Louise_BC)

> *'She's staying with me and doing massage to me every day and asking me, how you feel? Do you like to bring anything, to eat any food? It's so amazing, I can't find a word in my heart to say how it make me, how happy it make me.'* (Gina_BC&VABM)

Furthermore, at times it seemed that it was the continuity of this support, rather than the care being provided by a specific volunteer that was important:

> *'I got introduced to a few different Birth Companions because you never know really which one's going to come' but found that every one of them that I met was so friendly. You felt like you'd known them for a long time, it's not like you'd just met them. They are just so all for you and made you feel happy.'* (Louise_BC)

Emotional and Esteem Support

In order to contextualise and emphasise the positive aspects of care received by Birth Companions and/or the VABM service, we first highlight some of the difficulties faced among women who were not in receipt of these services. A number of the unsupported women made reference to the fact that they had no-one to be their birth partner and the negative implications of this. In the following four sub-themes we present issues that highlight the benefits of receiving positive support (via Birth Companions and/or the VABM team, as well as via wider maternity staff) in terms of: knowing that there was someone there for them; the non-judgemental care received; how the support developed their confidence and self-beliefs, and how they felt nurtured through the 'parenting the parent' approach afforded to them.

Insufficient support from personal networks

A number of the women interviewed had no or limited personal networks to support them during the perinatal period. This was often due to geographical distance or lack of/poor relationships:

> *'My mum was like with me* [for] *my other son and I had my family in Manchester. And over here there's nobody, so I thought I'd have to go and have my baby by myself.'* (Louise_BC)

> *'I don't have family here, I don't have anything here.'* (Rebecca_BC)

> *'Not so much from my family, I've not got a good relationship with my family.'* (Kathy_BC&VABM)

> *'No, I didn't have no one…..It was a little bit hard, you know, but what can you do? You have to be strong.'* (Mandy_BC)

> *'I've got no one… I don't want my baby to enter this world alone. I want her to know that there is someone behind that door waiting you know.'* (Hannah_NS)

A number of the women who were not supported by Birth Companions or the VABM team gave birth without a birth partner, and in the majority of occasions, this was not through personal choice. For example, one woman had a negative relationship with her family who *'didn't want me to continue with the pregnancy'* and while a friend, and refuge worker were asked to accompany her, these relationships broke down leading her to *'forget how to trust anyone at that point'*:

> *'Because there's not much people in my life and I knew that X's father and X* [son] *were out there waiting, that was more than enough for me. I didn't want to add to it because there's no point having someone there if you don't want them.'* (Hannah_NS)

One woman referred to how her limited personal networks were unable to offer her support due to illness or transportation issues, which ultimately meant she *'had no choice but to do what I did* [birth alone]'. Whereas another referred to how she had made a conscious decision to *'do this* [birth] *alone*'. While this mother would have preferred her partner to be present, as he was working out of the country, this was not possible. She therefore made an active decision to not ask anyone else through fear of embarrassing herself through emotional outbursts or exposing her body:

'So this time I said, do you know what, I don't want anyone. I asked my aunty to look after my daughter and I'm going to do this alone. My mum couldn't physically come. My uncle's wife really wanted to come and I said, please, I don't want anyone there. I think it was also, part of the reason why is because I knew at some point I was going to start screaming and it's just, one, embarrassing and, two, it's just the person's going to see everything.' (Gabby_NS)

Fiona, who had no birth partner present, described how she would have benefited from additional support due to the *'laid back'* attitude and clinical-based focus of her care providers:

'It would have been nice to have like, I don't know, maybe another party in the room, just in case I fell off the bed. But she kind of did her job, it wasn't too bad, but she could have been a bit, she remained a bit too laid back towards the end… Rather than looking at the CTG paperwork for so long, actually come over to my side to assist me, or look at actually what I was doing, to come and hold my hands.' (Fiona_NS)

A further woman also referred to how *'scared', 'frightened' and 'uncomfortable'* she would have been had her sister not been there to support her during labour as *'midwives and nurses, they have so many people to interact with and deal with, it's like you can't give them that stress.'* (Colette_NS)

Someone there for me

A number of women described the positive emotional impact of being supported in labour by a Birth Companions volunteer or by a midwifery staff member. The following descriptions illustrate how their support reduced women's feelings of anxiety and stress, and instilled a sense of calm to create a positive birth experience:

'That is amazing, you know, because if you go in to induce or if you go into the labour, you're nothing clear in your mind. I know you think you're going to see new baby and, but in my mind, I can't think of that. But I think, because I've got lot of things in my mind, this baby come but he's going to be in stress, you know. But I think a lot, a lot, a lot, that all the people have been so nice. All the Birth Companions, she come to see me and to stay with me and sleeping all night in the seat.' (Gina_BC&VABM)

'There was one lady [midwife]*, I can't even remember her name, but I bought her a card and bought her some chocolates and stuff, because I thought she was such a good help. And she really made me calm down because I was so scared with taking the epidural. I was panicking because I really thought that I could paralyse myself if I move… All of the, every single one of them on that ward, really was just there for me, supporting me constantly.'* [Shonna_VABM]

'She [Birth Companion] *was constantly telling me how good I was doing and how much, do you know, I'm doing well. She made me feel positive about the situation and not like stressed. I wouldn't have been able to do it without her. Oh it was, she made it so easy and so calming and she made me believe that I could do it. And all I had was gas and air and that was at six centimetres. She was like getting a cloth and*

wiping my head if I was hot and making sure that I had everything. I had like, I had this big beanbag, she made sure that I felt comfortable and she was rubbing my back. And I wanted to walk around, she'd be helping me. She just wanted to know what I wanted and whatever I wanted, then she'd help me with that. It was far better than when I had my mum there, yes…It was more relaxing, more Zen. And if I had to do it again I wouldn't have my mum there, I'd have the Birth Companions.' (Louise_BC)

Louise also went onto state how she *'would have had the birth I didn't want to have'* (e.g. an epidural) had the volunteer not been present as well as how the *'calming'* nature of the birth centre environment and *'amazing'* midwifery support enabled her to have a normal vaginal delivery:

'It's just such a calming, even the birth centre, I never wanted a baby in a birth centre, I never even knew they existed. And it's like, it's all about you and it's so relaxing. And the midwife, she was amazing. And she helped me not to tear as well, with a big baby like that, she helped me like to push him out.' (Louise_BC)

Other women who were not supported by Birth Companions or the VABM service spoke of how the humour and kindness expressed by the midwives helped to ease their labour pains and enabled them to retain a sense of control during the birth:

'They [midwifery staff] *were all so nice. Like maybe I didn't stress them, they didn't stress me. They were all lovely people, yes, straight up forward, lovely people. I really appreciate what they'd done. They keep you calm. They know how to keep you calm. If something's wrong they don't just burst it out and tell you. They wait for the right time. So yes, very understanding people, yes, the midwives are lovely.'* (Colette_NS)

'Through my contractions I had, honestly, they [midwifery staff] *really, really supported me, they were really nice to me. So I can say that my contractions were, you know, not even painful because of the laugh that they gave me, the support they gave me. So that counts a lot.'* (Gabby_NS)

One of the women also specifically referred to how the experience of feeling supported during childbirth was not one she had encountered previously:

'It was helpful that you know them [midwives] *and that you're not on your own. You can go in that hospital and give birth and you're not on your own. There's always someone there who will help you give birth and help you, and I never had that before.'* (Lynne_ BC&VABM)

While Gabby had no birth partner with her, she reported how the midwives in the delivery suite were *'so nice'* and '*kept reminding me that they're going to be there for me*'. In turn this enabled her to recognise that *'I actually don't need any support from anybody else'* and provided some peace of mind in that if she became pregnant again, *'I would do it again, I would go alone.'*

A few of the women had been cared for by the VABM midwives during a previous pregnancy. As reflected by Lynne below, the fact that she already had a connection with her caregiver who knew her *'as a person'* provided reassurance:

'Three of them [previous childbirth experiences], *X* [VABM midwife] *has actually been present at the birth. She's been very supportive, helping me through the pregnancy, during pregnancy and the birth. She was very helpful, one of probably the best midwives I've had. She was there when I needed her the most because I haven't got anyone, and she supported me throughout my three kids of giving birth. So we've sort of got a connection, me and X, she's sort of my main midwife. I like the other midwives but I think she's the main one, who knows me as a person.'*(Lynne_BC&VABM)

Non-judgmental care

A recurring issue for some of the participants, particularly in terms of their relationships with the VABM and Whittington maternity care staff, related to the non-judgemental care they received:

'She [VABM] *didn't judge me and, because I have had quite a few kids, you know, she was there to support me throughout the pregnancy and the birth, and I didn't feel alone.'* (Lynne_ BC&VABM)

'She [midwife] *wasn't judging me and that she understood.'* (Dianna_NS).

For some, this was at odds with their expectations, likely associated with former negative interactions with authority figures:

'We thought that we'd be judged and kind of all treated the same, as everybody else under the same team. And kind of be treated like we were nasty people and things like that. Whereas in reality, the team [midwifery] *were amazing and really made us feel as a family and as independent people. And we were never judged on our circumstances, not once.'* (Anna_NS)

Another participant felt that the knowledge and experience of the VABM team in dealing with more complex issues was evident *'you know, because these are the kind of women that they deal with daily'.* This in turn meant that she *'didn't feel judged by them and I felt very comfortable'* (Sally_VABM).

While non-judgemental care was more frequently mentioned in relation to the VABM team and other maternity staff, other participants highlighted similar support from Birth Companions volunteers, statutory providers or from within their personal networks. These insights indicate how an authentic woman-centred approach enabled women to build positive relationships, to trust those providing their care or support, and enabled them to open up and disclose *'honest'* accounts of their feelings, experiences or needs:

'If you've got anything on your mind you can just get it off because you can chat to them [Birth Companions] *about anything and they don't judge you.'* (Louise_BC)

'[Her partner's mother and I] *sit there and we'll talk, it doesn't matter how long it's for, but we'll sit there and talk. And I'd feel better for it because I've got someone sitting there and there're not judging me, they understand.'* (Dianna_NS)

'I just tend to talk to her [social care worker] *randomly about other things going on, strongly connected to the situation. So I don't know, sometimes I use her as my kind*

of psychotherapist. I just talk to her about whatever, even if there's little she can do about it, but at least she knows how I'm feeling.' (Fiona_NS)

Another made reference to the '*unbelievable'* support she has received from her key worker at a refuge, and how these disclosures led to more therapeutic-based support being provided:

'I've received a lot of support from my key worker at my women's refuge. She is absolutely unbelievable and talking to her about things and her giving examples made me realise about different types of abuse that I was being given by my now ex. And yes, that's helped a lot.' (Kathy_ BC&VABM)

Encouraging and developing self-confidence

The 'lifeline' of contact with Birth Companions together with positive affirmations of their progress made some of women feel less *'scared'* about their life situation, and more confident in their parenting abilities:

'It's such a more positive experience and it's, I feel reassured that I've always got someone on the end of the phone [Birth Companion] *that will come and see me and be there, and even just to talk to, it's made me confident a lot more as well as a mother.'* (Louise_BC)

Louise referred to how the Birth Companions enabled her to have a *'happy'* pregnancy which in turn meant that she had a *'happy baby'* as well as the significance of this support for her future reproductive choices, '*I think they* [Birth Companions] *make me want to have more babies.'*

Some of the women also referred to how the on-going encouragement and positive feedback from the volunteers motivated them to sustain a healthier lifestyle:

'I'm now a previous drug user and they [Birth Companions] *are supporting me around staying off of it, and just being there for me emotionally. Just talking to me about how much better X* [son] *would be. He needs to be with his mum, so yes, just little things like that. And they said, I've not used now in nearly three weeks and they've said that, like they've come in every day to see me since I had X. And they've constantly just gave me compliments and how well I'm doing.'* (Kathy_BC&VABM)

A further participant described how the VABM midwife went beyond normal care boundaries to empower her to have self-belief in her abilities:

'It's made me so, so confident to do what I'm doing. I think sort of in my mind, I'm stupid woman, look everyone, they see me, I think it in my mind. But not anyone would think that but my mind think that. But X [VABM midwife] *said, yes, I'm going to help you, you're doing a good job, everything going to be OK. And I'm so proud for that woman, she make me so nice, she make me so, so confident.'* (Gina_BC&VABM)

Parenting the parent

Some of the women described the concept of being parented when they spoke about their positive experiences of care; whether this care was received from Birth Companions, the Whittington midwifery staff, from the VABM service or from other agencies.

A few of the women described the staff at the Whittington as being like *'one big family, the surgeons and the midwife and everyone working in unison. I mean it was lovely.'* (Hannah_NS) Another described the staff as:

> *'The best you can have when you give birth because they don't judge you. And if you've got nobody they're like your parents, they're there to help you.'* (Lynne_BC&VABM)

Others used similar familial and parental references when they spoke of the support they received from Birth Companions:

> *'Very good people. It's like your family is there, you know. It's like your family. I never ever had like that in my life.'* (Emma_BC&VABM)

> *'So it was nice for the Birth Companions to cut the cord and be a part of that, see me through the pain. Because they've seen women give birth before, so it's not nothing new to them. And it's nice because it felt like they were, they were your mum or your parent for the day.'* (Lynne_BC&VABM).

Lynne referred to the *'bond'* she had with the volunteers, the VABM and the midwifery team due to the care and support she was afforded, which in turn led her to feel; *'you could leave your life with them, in their hands really'*. The midwife held her baby after birth, and '*showed her off*' to the staff; with this action demonstrating pride in the mother's achievement. The capacity to trust again was particularly significant for this mother due to her history of abuse; *'before I wouldn't trust anybody, being hurt and abused as a child*.'

This concept of the family was also used when referring to other support some of the women had received. Emma explained:

> *'She's* [Family Support worker] *helped me for everything, you know, she's cleaning a little bit. She's very, very good woman. Oh yes, she's like a mother'*. (Emma_BC&VABM)

Network Support

As evidenced within the wider literature (refer to B.1) and discussed above, marginalised and vulnerable women are often isolated, with limited, or poor support networks. However in a number of occasions, we found that women, including those who did and do not receive support from Birth Companions and the VABM team were able to access support from within available/existing networks of support both during pregnancy as well as the postnatal period. Further issues discussed in this theme relate to the difficulties a number of women faced when navigating statutory provision, and the supportive ways in which Birth Companions or the VABM midwives helped women access appropriate, needs-based support. The final sub-theme concerns the 'companionship' and social support the women received from the Birth Companions service.

Drawing on support from available/existing networks of support

A few of the participants described how they were able to access support from their partners and the significance of such:

'If they [partner and friend] *hadn't been there, I wouldn't have, well obviously I would have done because there's no choice. But, when the baby's coming it would have been very difficult to go through that on my own.'* (Anna_NS)

'My partner, my friends and my family, mainly my family. Everyone was well excited for me and just couldn't wait to see this baby because it was my first.'
(Shonna_VABM)

'He's [partner] *been absolutely brilliant, from the moment that I told him* [about the pregnancy] *until basically, now.'* (Dianna_NS)

Other women who did not have support from partners were able to draw on networks of family and friends to help them during their pregnancy:

'My mate, she offered to look after me for a couple of weeks because I become so ill at the refuge, and mentally it was affecting me, being stuck in one room. So I spoke to my friend, she agreed for me to come and stay with her. And she took X [older daughter] *to school in the mornings, because her daughter goes to the same school.'* (Hannah_NS)

'Some very close friends have been very supportive during my pregnancy, coming to visit me and helped me out. And my sister as well has been absolutely wonderful, she used to come round and help prepare meals for me and washing up and shopping. And my daughter's father, he'd help from time to time as well, shopping and companionship.' (Karla_BC)

'My brother, he helped me buy this stuff from when I was pregnant with my three year old, because he's got a car. So we would go shopping together, he will come and take me shopping on Sundays.' (Colette_NS)

Some women also spoke of how family members and friends helped them to take care of themselves and their new baby:

'I'm going to stay with my mum for a while. I'm planning to stay until this baby is about six weeks old because I'm afraid to wash her. And while my mum was great with my first daughter, she helped me a lot and I believe she can help me a lot with this one as well, emotionally and physically.' (Gabby_NS)

'I get a lot of help from them. Mainly my sister, she would stay over at the weekends or when she doesn't have school or college. I was just lucky to give birth in the summer holidays, to have her with me.' (Colette_NS).

'As the days went by and it came into like the second week, obviously the hospital doesn't have a laundry facility and I was needing to get washing done. Because, you know, you're not really expecting to spend that long in hospital, are you? So she would take clothes that I need washing myself and for X [daughter] *and sort of wash them and then bring them back, dry them in the laundrette and that kind of thing. And then buy me anything that I might need.'* (Karla_BC)

In one occasion one of the women's friends was applying for statutory powers to provide care for her daughter:

> *'She's* [friend] *doing more than giving me emotional support and physical support, she's actually applying for a special guardianship order to take care of X* [daughter]*.'* (Kathy_ BC&VABM)

Navigating the statutory provision

A number of women, particularly those who received no additional support from Birth Companions or the VABM team, spoke negatively about their interactions with other statutory providers:

> *'There was one time she came in with like a, I think she was like a psychiatric nurse or something like that. She came with a guy, I don't know if he was a nurse as well, and they were just asking me questions. And I felt it went very well, and this was just literally within the first week or something of having given birth. So, you know, everything's new, I've never had a baby before so you're learning things. And I felt, you know, I felt I came across quite well. And then later I found out that she'd said, apparently, that X* [daughter] *was crying and I didn't attend to her. And I don't, that's not how I remember it at all. So I'm not very happy that she's said that because I really don't think that would have been the case. So I don't know what she was talking about. Yes, I wasn't very happy with that.'* (Karla_BC)

One described the support from Social Services as *'hopeless'*, whereas another highlighted the lack of involvement from the Perinatal Mental Health team:

> *'Perinatal mental health team, who I only saw once and then once after Social Services got involved, there wasn't really much support per se.'* (Anna_NS)

A further woman emphasised a lack of understanding amongst social workers about her specific needs and the need for joint working practices:

> *'I think with the social services side of things, they need a better understanding of drugs. They thought that you could give a crack cocaine user methadone to come off of crack cocaine, which is not the case. That's only for heroin. They really don't know anything about drugs. So if they're going to sit there criticising people and having a go at people for taking drugs, then know more about the drug first. So I think they should be working closer with DASH* [drugs and alcohol service] *and with the hospital as well.'* (Kathy_BC&VABM)

Others such as Hannah described the limited and somewhat punitive 'support' received from key workers at the refuge:

> *'She* [key worker] *would only call upon me when she needed to do the risk assessments at the end of every month, which was them showing that they were, you know, that they'd gone through their procedures and so on, with the mums and the children. But, and then, yes, to pay the weekly rent, service charges, they were always on our backs to do that. And cleaning, we had to clean as well, from the top floor to the ground floor and communal areas, regardless of your limitation, you still had to do it.'* (Hannah_NS)

When Hannah requested support taking her son to school, she was told *'no, you've got to do it all yourself. It doesn't matter, you'll have to take a bus, all the other mums do it, what makes you any different?'* While this mother wanted to gradually move back to her former address she was told *'if you're not going to come back and stay, you need to clear the room out'*. This in turn created problems in Hannah accessing antenatal care due to the refuge staff not notifying her that an appointment letter had been received, or informing social services that she had changed address. This lack of care and support was implicitly felt; *'I feel so alone that you're talking but no one's listening. And I've had that all my life at home and I'm having it again in a refuge'.*

Easing the pathway to access wider support

Women who were in receipt of additional support reported how Birth Companions and/or the VABM midwives helped them in their interactions with statutory providers in a number of different capacities. One participant who was not case-loaded by the VABM team but was offered support post-birth due to child protection issues described how they:

> *'Came to meetings when Social Services came to see us on the ward. They'd* [VABM team] *chat to us before and afterwards. They'd give us private rooms to kind of, a private room to go and talk in if we needed to, away from the ward. They were fantastic emotionally, they were really supportive. '*(Anna_NS)

In this case, support went further with members of the VABM team acting as an advocate for the woman to ensure that she received appropriate treatment with regard to the potential removal of her daughter:

> *'She* [member of VABM team] *then came back and said, look, I need to talk to you. Pulled me aside, explained that they'd said that they were considering the emergency protection order and instant removal. And she said to me, I'm not going to let them remove her* [daughter] *without a court order. She's not going to go anywhere for now, don't worry. She* [VABM midwife] *said, we'll keep you here as long as we need to, until this is resolved. She said, but I need to tell you that this is what they've said to me. I'm going to advise you now to phone your solicitors and phone X* [partner] *and get him to get a taxi to the hospital, because they're coming up to see you at 5 pm. And she was amazing, she laid it all out. I was in hysterics, crying my eyes out at the prospect of losing my daughter. She calmed me down, she spoke to me about everything, she was amazing, absolutely amazing.'* (Anna_NS)

As well as how the VABM team provided wider familial support through providing information and reassurance to her father:

> *'I think, my dad turned up to the hospital at one point and knocked on the VABM team midwife door. And even though he's not really involved, they still talked to him about everything. Because a lot of the time, I've noticed, because he's a grandparent, people keep telling him, well you're not party to anything and it's not really got anything to do with you. And he kind of feels a little bit left out, so he was quite glad that he had someone to kind of find out more information from, you know.'* (Anna_NS)

This commitment to provide support and advocacy was also evident within the healthcare setting. Birth Companions and the VABM midwives acted to ensure that the best interests of

individual women were met by seeking solutions to their specific needs. One woman explained how Birth Companions supported her when she was struggling to express herself:

> *'They* [maternity staff] *say, I can't stay in there, I need to go home first. I say, I feel, not feel not really safe or something, worry too much. That's when I call Birth Companion and they just help me. And they asked the midwife* [and I] *stay in the hospital.'* (Leah_BC)

Another explained how a member of the VABM team made arrangements for her to stay on the postnatal ward so she was in closer proximity to her daughter:

> *'I was able to stay, after birth I stayed in hospital for about ten days, which was very good because after a week they would have dismissed me. But thanks to* [member of VABM team], *she managed to make me stay another couple of nights, even though I wasn't clinically really in need of, it was just in order to stay closer to my daughter because I don't live near.'* (Sally_VABM)

Both Birth Companions and the VABM team were also reported to have signposted and linked women into other agencies as appropriate. This involved booking appointments, facilitating meetings and following up on-going situations with agencies such as social services, GPs, solicitors and immigration officials as well as dealing with housing issues. Women were also linked into other local support agencies that could provide additional resources and to facilitate continuation of support post discharge from Birth Companions:

> *'They referred me on to Haringey Women's Forum actually. Because they* [Birth Companions] *were kind of indicating that their service was sort of coming to an end soon.'* (Karla_BC)

> *'And X from Birth Companions, she called the British Red Cross for me, she asked me, she said, do you want to go to the British Red Cross? And I said, yes. And British Red Cross, they called me, they give me appointment, I went there. They gave me sixty pounds and for the travel seven pounds and, you know, that was helping me as well.'* (Mandy_BC)

Companionship

Women who received support from Birth Companions often described how the contact with the volunteers provided companionship, which in turn reduced their feelings of loneliness and isolation:

> *'I really appreciated it* [hospital visits by a Birth Companion] *actually because it's quite lonely. Sometimes I got a bit sad, I'd sort of look around and see these other women had given birth, and just two or three days later they'd have all their family and friends. And then they'd leave and then there'd be another one. And I'd sort of be stuck there, I thought, how long am I going to be stuck in this place…. they* [Birth Companions] *just would come in for like, I think maybe an hour, and just, yes they would just come really, just more companionship. And I really appreciated it at the time because there was some days, I mean I had lots of friends visiting, but it was just some days were a bit lonely.'* (Karla_BC)

One woman described the *'overwhelming'* impact of having this support:

> *'It's just, they* [Birth Companions] *just did everything and I think everyone made it such a better, everyone that was around me and having them there was like the best thing ever. I'm just glad that everything went well and everyone was so supportive, even though I didn't know them. Because I didn't know anybody, I moved to London and I didn't know anybody. And now it's like I've, I feel like I've had so much support around me, it's overwhelming, the support*.. (Louise_BC)

Another participant explained:

> *'It was while I was actually in Whittington Hospital for those two weeks. I had, you know, sometimes I got a bit lonely being there. So I had some volunteers coming to visit me, which I really appreciated that, they were really lovely, all really lovely people. And just for companionship and just being very kind and supportive.'* (Karla_BC)

The women's descriptions of their relationships with the volunteer(s), and in some occasions with their community midwife often signified a friendship. One participant referred to how she could just *'chat about whatever'* with her Birth Companion. Others described their interactions as social events, such as *'going out for coffee'*:

> *'She* [Birth Companion] *asks me what we want to do and we maybe, we went to the park last time, to the café in the park and we had a coffee, I had a hot chocolate. We just chat and she loves the baby.'* (Louise_BC)

In some sense these insights seemed to suggest that the content of the interaction was at times less important than the social contact it provided.

E. Summary of key findings

E.1. Summary of socio-demographic and birth related/outcome data

Overall, analyses of the socio-demographic and birth related/outcome data offer similar insights to the wider research (refer to section B.1) in that vulnerable women when compared to non-vulnerable women were more likely to be younger ($p<0.001$); from a BME ethnic background ($p<0.001$); have had a higher number of previous pregnancies ($p<0.001$); to be a current/ex-smoker ($p<0.001$); to attend a booking appointment late in their pregnancy ($p=0.001$); to stay in hospital for a longer period of time ($p<0.001$); to have a baby born at an earlier gestational age ($p<0.001$) and with a lower birth weight infant ($p<0.001$) and to be less likely to breastfeed post-birth ($p<0.001$).

While inferential statistics could not be performed on the 'vulnerable only' sub-sample, and caution is needed when interpreting the data, some key insights of interest are outlined as follows. Women who received support (from Birth Companions and/or the VABM team) compared to those who were referred only were more likely to: have attended a booking appointment later in their pregnancies; be a current smoker; not use anaesthesia but be more likely to use medication during labour; not experience a perineal tear; stay in hospital for a longer period of time and have a lower birthweight infant. Further analyses between different

models of support indicates that women who received support from Birth Companions, when compared to those who were referred only/case-loaded by the VABM team were less likely to be induced and to use anaesthesia during labour; more likely to stay on the postnatal ward for a protracted period of time; more likely to have a vaginal delivery and to have breastfed (exclusively or partially) in the early postnatal period[39].

E.2. Summary of qualitative findings

While a number of the vulnerable women were able to access support from within their personal networks, others described receiving minimum or no support as well as poor familial-based relationships. A number of women who did not receive additional support (from Birth Companions and/or the VABM team) had to give birth unaccompanied, which was often not through personal choice. Some of these unsupported women also faced challenges though a lack of continuity in care provider which could lead to inappropriate, insensitive and inconsistent care being provided. The lack of relationships forged between women and those providing their care also resulted in some of these women feeling unwilling to share their anxieties, which in turn raises concerns about the provision of appropriate support.

These insights present a sharp contrast to those who received support from Birth Companions, the VABM team as well as others who received what they described as positive maternity based care. These women described how the provision of non-judgemental care enabled them to forge positive and trust based relationships where they felt able to make sensitive and emotion-based disclosures. They often made highly appreciative remarks about feeling prepared for the birth, more knowledgeable about infant feeding, as well as how the calm presence of a supportive volunteer or midwife led them to have a more positive birth experience. Women who received this additional support also often made reference to the responsive care they had received, such as through offering contacts (i.e. antenatal or social based appointments) to meet their needs and lifestyles.

By virtue of the complex psychosocial issues faced by these women, many were involved with other statutory providers, such as social services, women's shelters, housing and immigration. Some women reported difficulties in terms of: access to service provision; negative and insensitive interactions and how these providers did not always appreciate or understand their concerns. However, contrary to these views, women who were case-loaded by Birth Companions and/or the VABM midwives frequently cited how the volunteers/midwives operated as advocates through negotiating solutions on their behalf and sign-posting and facilitating access to needs-based support.

The additional areas of support emphasised by women who were case-loaded by Birth Companions related to instrumental and emotion-based care such as via practical breastfeeding support, arranging and accompanying them to statutory appointments and providing on-going praise and encouragement for their achievements. For these women, this positive feedback also enabled them to feel more confident in their parenting abilities and helped them to sustain a healthier lifestyle. The fact that the volunteers provided, and often

[39] As only a small number of interview participants received support from the VABM service only (n=2) further comparisons between the vulnerable and supported women in the whole population sample and interview participants was not undertaken.

on a proactive basis, a range of mother, baby and family related items was very positively received; with these items not only providing basic necessities (such as money, food, clothing and baby-related items) but also a sense of wellbeing and comfort through being taken care of. As volunteers often contacted women for purely social occasions this reduced their feelings of loneliness and isolation. Furthermore, the flexibility and frequency of contact provided women with a lifeline of knowing there was someone they could turn to, should the need arise.

E.4. Strengths and limitations

The strengths of this study are that it involved a whole population 12 month sample to compare socio-demographic and birth related/outcome data between vulnerable and non-vulnerable women. While originally it was anticipated that additional data such as the number of antenatal contacts attended would be collected, this was impossible due to incompatible IT systems. The hospital IT systems also do not allow for additional identifiers to be included (i.e. woman classified as vulnerable due to safeguarding/child protection concerns). This led to difficulties marrying up individual cases across the varied recording systems and anecdotal evidence suggests that the number of 'vulnerable' women reported is an under-representation. It is also important to reflect that the findings only offer a partial perspective. For example, while women who are younger and from a BME ethnic background are more likely to experience complex psychosocial issues - this demographic profile was not necessarily reflected among those who received additional support. However, as discussed earlier, decisions as to who is case-loaded by whom are based on a multitude of issues such as the level of complexity and need, the women's existing support networks and women's willingness for referral (i.e.. some women may not want to be referred to Birth Companions). Information on the other forms of support that women may have received and which may have impacted on outcomes, e.g. those referred into the Perinatal Mental Health Service were also not captured in this study. A further caveat is that while information as to whether a vaginal or caesarean birth was recorded; further insights in terms of whether this was a forceps, ventouse or 'normal' delivery was not detailed.

It was intended that all the interviewees would be represented within the 12 month birth data. As there were difficulties in the midwives finding time to undertake the interviews as well as issues in recruiting women, this was not achieved (with only seven of the interviewees represented in the wider data set). While these women will have received similar types of support from Birth Companions or the VABM service, it would have enabled a more robust interpretation of women's experiences and their associated birth related/outcome data to be undertaken.

The engagement of hard to reach women in research projects is often difficult due to their reticence in engaging with formalised activities and their lack of access to statutory provision. However, in this study the experiences of 17 women with complex needs were captured. As the interviewers were midwives, this may have led to women feeling unable or unwilling to disclose negative experiences. Care was taken to try and mitigate this bias by ensuring that the interviewer had not provided direct care to the woman; however, the fact that the interviewer was a maternity professional may have inhibited more honest and open reflections. A further limitation was that the interviewers had a limited or no background in research. However, training was provided at the start of the study, and early transcripts were reviewed and feedback was provided to ensure that open, probing questions were used. While women who were recruited may represent those who were more positive about the care

they received, the fact that a range of different positive and negative perspectives were captured suggests otherwise.

F. Conclusion and Recommendations

Overall the insights from this study highlight that vulnerable women and their infants can face poorer outcomes due to attending booking appointments later in pregnancy, having preterm and low weight infants, and being more likely to smoke and to formula feed their infants. Those who do not receive additional support (from Birth Companions and/or the VABM team) often give birth unaccompanied, receive care from multiple caregivers, experience inconsistent and inappropriate support and face numerous challenges in engaging with wider statutory provision. Conversely those who received additional support spoke highly about the non-judgemental, responsive, flexible and women-centred care and support they received from a maternity as well as wider statutory perspective. While there are caveats in the interpretation of the findings due to the small samples involved, the insights also suggest that women who receive additional support have improved birth related outcomes in terms of being less likely to be induced, to use anaesthesia during delivery and to experience a perineal tear.

It is difficult to make any firm claims about the 'additional' benefits of the Birth Companions support as many of the women had also received support from the VABM service. Notwithstanding these limitations, it is important to reflect that the VABM service only tends to offer antenatal support and Birth Companions provide services across the perinatal period. Women frequently referred to how the volunteer Birth Companion enabled them to feel less stressed, more calm, relaxed and 'in control' during labour. The frequency and availability of social contacts, opportunities to discuss and share concerns, instrumental/practical based infant feeding support, as well as the provision of practical items helped to improve women's sense of wellbeing and confidence. The positive impact of this support may well be reflected in the findings that women who received additional support by Birth Companions (when compared to those who received support from the VABM service only) were less likely to be induced and use anaesthesia and more likely to achieve a vaginal delivery (together with the associated positive impact of a vaginal compared to an caesarean birth on maternal and infant morbidities) and to breastfeed their infants. These findings thereby concur with wider literature which highlights that women with complex psychosocial needs who receive additional support during the perinatal period were more likely to have a spontaneous vaginal delivery, and less likely to have anaesthesia and caesarean births (Hodnett et al. 2013; Rayment-Jones et al. 2015). They also support insights into how practical breastfeeding help from lay supporters can increase breastfeeding initiation rates (Britton et al, 2007).

While many of the women made suggestions to improve interactions and care delivery provided by health and other statutory providers, these are outside of the remit of this study. None of the women offered specific insights to change or develop the Birth Companions service rather they greatly appreciated and valued the *'kind', 'lovely'* women-centred instrumental, social and emotional support they received. However, a number of key overarching recommendations which largely focus on improving women's access to, and receipt of additional support are as follows.

The VABM is a well valued service that provides continuity and specialist support. However, from a hospital trust perspective it is not seen as a priority and lacks funding. The volume of referrals (~400-500 a year) and the fact that this service is only supported by two full-time

positions, means that the need for this service far outweighs the available resources. The level of need also evidenced by the fact that the Trust is situated in a Borough that is ranked as the one of the 14th most deprived areas in England and the 5th most deprived in London (Islington 2015) and has one of the highest rates of child poverty in England with over 42% of children living in poverty (Islington 2013). Case-loading opportunities for the VABM midwives are limited. The high number of referrals also means that the VABM midwives are unable to follow-up individual cases to ensure that suitable support has been accessed. While the new clinical supervision role assigned to the VABM midwives has benefits of skilling-up midwives and relieving pressure on the VABM service (i.e. from undertaking all care-planning documentation), concerns about the potential implications on their capacity to provide direct and indirect support were reported. The VABM service is also considered to be poorly understood in the wider hospital structure as it is managed by the general safeguarding service and not maternity. This creates another layer of complexity in trying to ensure there is an understanding of the value of the service as well as good communication and governance structures across the different areas of service provision. Further resources would allow more time for: the planning, development and promotion of the service; further case-loading opportunities; the provision of antenatal classes for vulnerable women and offering more 'meet and greet' sessions to facilitate more involvement with individual cases.

Currently, the number of women who are referred into Birth Companions is low. However, women in receipt of this support frequently referred to feeling less isolated, more informed, better prepared; leading to improved wellbeing and confidence. The care provided by the VABM team and Birth Companions also appeared to dovetail to create more positive birth experiences and outcomes for women and their infants. The VABM team does not have the capacity to follow up individual cases and concerns about women *'slipping through the net'* were expressed. An increase in referrals to Birth Companions could help to alleviate these anxieties, as well as enable appropriate, needs-based support to be provided for women and their families. Regular opportunities for the VABM team and Birth Companions staff to meet and discuss current case-loading opportunities may help to increase the number of referrals received as well as enable opportunities to provide feedback on specific cases. A further suggestion to help encourage referrals could be for a volunteer to be present at the 'meet and greet' session with a VABM midwife.

The VABM offers a liaison service for community midwives to enable them to plan and enact appropriate support. However, the difficulties and challenges faced by women who did not receive any additional support during the intra-partum period warrants further attention. This could be achieved by increasing referrals into Birth Companions and women being accompanied by a doula. However, it also emphasises a need for additional training or co-working with the hospital midwives to ensure that appropriate support is provided.

Due to the identified difficulties in the recording and monitoring of vulnerable women, hospital-based IT systems should be adapted. Further collaboration between Birth Companions and the VABM term in order to share details of all the women who receive support from Birth Companions (such as the women who the VABM team may be unaware of due to the support being provided in prisons, or those who self-refer) should also be undertaken. A more robust hospital-based recording system that can link additional information to routinely collected birth related/outcome data in terms of who has safeguarding issues/concerns, what these concerns are and the subsequent support received would be beneficial. This would enable accurate records in terms of the number of women who are referred into and/or supported by the VABM service (as well as other

services/providers, e.g. Birth Companions) to be retained, as well as facilitate the on-going assessment and monitoring of the potential benefits of this supplementary support.

G. References

Attride-Stirling, J. (2001). Thematic networks: an analytical tool for qualitative research. *Qualitative Research,* 1, 385–405.

Birth Companions. (2013). *Annual Report 2012-2013*. Birth Companions, London. Available at: http://www.birthcompanions.org.uk/media/Public/Resources/Ourpublications/Birth_Companions_13-14.pdf. Accessed online 06/08/2015.

Britton, C., McCormick, F.M., Renfrew, M,J., Wade, A., King, S.E. (2007). Support for breastfeeding mothers. *Cochrane Database Syst Rev.,* 24(1):CD001141.

Confidential Enquiry into Maternal and Child Health (CEMACH). (2009). *Perinatal Mortality*, CEMACH, London.

Cornell, B. (2010). *Newpin: An evaluation of the services of St Paul's Newpin Westminster*. Available at: http://www.newpincentre.org.uk/new/evaluation/ Accessed online 09/11/2015.

Cross-Sudworth, F., Williams, M., Gardosi, J. (2015). Perinatal deaths of migrant mothers: adverse outcomes from unrecognised risks and substandard care factors. *British Journal of Midwifery,* 23(10):734-740.

D'Souza, L., Garcia, J. (2004). Improving services for disadvantaged childbearing women. *Child: Care, Health and Development,* 30(6): 599-611.

Dean, S.V., Mason, E.M., Howson, C.P., Lassi, Z.S., Imam, A. M. & Bhutta, Z.A. (2013). Born Too Soon: Care before and between pregnancy to prevent preterm births: from evidence to action. *Reproductive Health*. 10(Suppl. 1) Available at: http://www.reproductive-health-journal.com/content/10/S1/S3S3 Accessed online 01/12/2015.

Department of Health (DH). (2007). *Getting the Right Start: National Service Framework for Children*. DH, London.

Department of Health (DH). (2007). *Maternity Matters: Choice, access and continuity of care in a safe service*. DH, London. Available at: http://webarchive.nationalarchives.gov.uk/20130107105354/http:/www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_074199.pdf. Accessed online 09/08/2015.

Downe, S., Finlayson, K., Walsh, D. & Lavender, T. (2009). 'Weighing up and balancing out': a meta-synthesis of barriers to antenatal care for marginalised women in high-income countries. *British Journal of Obstetrics & Gynaecology*, 116(4):518-29

Dykes, F., Hall Moran, V., Burt, S., Edwards, J. & Whitmore, M. (2003). Adolescent mothers and breastfeeding–experiences and support needs: an exploratory study. *Journal of Human Lactation,* 19:391-401.

Feldman, R. (2013). *When maternity doesn't matter: dispersing pregnant women seeking asylum.* Maternity Action & Refugee Council, London. Available at: https://www.refugeecouncil.org.uk/assets/0002/6402/When_Maternity_Doesn_t_Matter_-_Ref_Council__Maternity_Action_report_Feb2013.pdf Accessed online 09/07/2015.

Flenady, V., Koopmans, L., Middleton, P., Frøen, J.F., Smith, G.C., Gibbons, K., Coory, M., Gordon, A., Ellwood, D., McIntyre, H.D., Fretts, R. & Ezzati, M. (2011). Major risk factors for stillbirth in high-income countries: a systematic review and meta-analysis. *The Lancet,* 377(9774):1331-40.

Goldenberg, R, L., Culhane, J.F., Iams, J.D. & Romero, R. (2008). Epidemiology and causes of preterm birth. *The Lancet,* 5,371 (9606):75-84.

Gray, R., Bonellie, S.R., Chalmers, J., Greer, I., Jarvis, S., Williams, C. (2008). Social inequalities in preterm birth in Scotland 1980-2003: findings from an area-based measure of deprivation. *British Journal of Obstetrics & Gynaecology,* 115(1): 82-90.

Gray, R., Headley, J., Oakley, L., Kurinczuk, J.J., Brocklehurst, P. & Hollowell, J. (2009). *Inequalities in infant mortality project briefing paper 3. Towards an understanding of variations in infant mortality rates between different ethnic groups in England & Wales*. Oxford: National Perinatal Epidemiology Unit.
Available at: http://www.npeu.ox.ac.uk/infantmortality Accessed online 11/12/2015.

Hall Moran, V., Edwards, F., Dykes, F. and Downe, S. (2007). A systematic review of the nature of support for breastfeeding adolescent mothers. *Midwifery,* 23, 157-171.

Hamilton, D. & Foster, D. (2015). Expanding the Service: Goodwin Trust Volunteer Doula Project. *British Journal of Midwifery,* 23(10), 742-744.

Hoddinott, P. & Pill, R. **(**1999). Qualitative study of decisions about infant feeding among women in east end of London. *British Medical Journal,* 318(7175): 30-4.

Hodnett, E.D., Gates, S., Hofmeyr, G.J., Sakala, C. (2013). Continuous support for women during childbirth. *Cochrane Database of Systematic Reviews,* 7. Art. No.: CD003766. DOI: 10.1002/14651858.CD003766.pub5.

Hollowell, J., Kurinczuk, J.J., Oakley,L., Brocklehurst, P. & Gray, R. (2009). *A systematic review of the effectiveness of antenatal care programmes to reduce infant mortality and its major causes in socially disadvantaged and vulnerable women.* National Perinatal Epidemiology Unit, University of Oxford.
Available at: https://www.npeu.ox.ac.uk/downloads/files/infant-mortality/Infant-Mortality-Antenatal-Care-Report.pdf Accessed online 10/12/2015.

Hollowell, J., Oakley, L., Kurinczuk, J.J. et al. (2011). The effectiveness of antenatal care programmes to reduce infant mortality and preterm birth in socially disadvantaged and vulnerable women in high income countries: a systematic review. *BMC Pregnancy and*

Childbirth, 11:13. Available at: www.biomedcentral.com/1471-2393/11/13 Accessed online 10/10/2015.

Hollowell, J., Oakley, L., Vigurs, C., Barnett-Page, E., Kavanagh, J., Oliver, S. (2012). *Increasing the early initiation of antenatal care by Black and Minority Ethnic women in the United Kingdom: a systematic review and mixed methods synthesis of women's views and the literature on intervention effectiveness.* National Perinatal Epidemiology Unit, University of Oxford EPPI-Centre, Social Science Research Unit, Institute of Education, University of London. Available at: https://www.npeu.ox.ac.uk/downloads/files/infant-mortality/Infant-Mortality---DIVA-final-report-Oct-2012.pdf Accessed online 13/12/2015.

Islington Child Poverty Strategy. (2013). Available at: http://www.islington.gov.uk/involved/consultation-engagement/consultations/Pages/2013/child-poverty-strategy.aspx Accessed online 13/12/2015.

Kapaya, H., Mercer, E., Boffey, F., Jones, G., Mitchell, C. & Anumba, D. (2015). Deprivation and poor psychosocial support are key determinants of late antenatal presentation and poor fetal outcomes-a combined retrospective and prospective study. *BMC Pregnancy and Childbirth,* 15(1):309. Available at: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4660789/ Accessed online 01/12/2015.

Knight, M., Kenyon, S., Brocklehurst, P., Neilson, J., Shakespeare, J., Kurinczuck, J.J. et al. (2014). *Saving Lives, Improving Mothers' care- lessons learned to inform future maternity care from the UK and Ireland confidential enquires into maternal Deaths and Morbidity 2009-2012.* Oxford National Perinatal Epidemiology Unit, University of Oxford. Available at: https://www.npeu.ox.ac.uk/downloads/files/mbrrace-uk/reports/Saving%20Lives%20Improving%20Mothers%20Care%20report%202014%20Full.pdf Accessed online 03/12/2015.

Lewis, G. & Drife, J. eds. (2004). *Confidential enquiry into maternal and child health: Why mothers die.* CEMACH, London.
Lewis, G. ed. (2007). *Confidential Enquiry into Maternal and child health: Saving mothers lives: reviewing maternal deaths to make motherhood safer 2003-2005. The seventh report on confidential enquiries into maternal deaths in the United Kingdom*. CEMACH, London.

Lewis, G. (2011). The eighth report on Confidential Enquiries into Maternal Deaths in the United Kingdom. *British Journal of Obstetrics & Gynaecology,* 118, (Suppl. 1):1–203.

McAndrew F., Thompson J., Fellows L., Large A., Speed M. & Renfrew M. J. (2012). *Infant feeding survey 2010.* The Information Centre for Health and Social Care. [Online] Available from: .http://www.hscic.gov.uk/catalogue/PUB08694/Infant-Feeding-Survey-2010 Consolidated-Report.pdf Accessed online 23/10/2015.

McAuley, C., Knapp, M., Beecham, J., McCurry, N. & Sleed, M. (2004). *Young families under stress: outcomes and costs of Home-Start support*. Joseph Rowntree Foundation, Available at: http://www.jrf.org.uk/sites/default/files/jrf/migrated/files/1859352189.pdf Accessed online 09/10/2015.

McCarthy, R. & Haith-Cooper, M. (2013). Evaluating the impact of befriending for pregnant asylum-seeking and refugee women. *British Journal of Midwifery,* 21(6): 404–409.

McLeish, J. & Redshaw, M. (2015). Peer support during pregnancy and early parenthood: a qualitative study of models and perceptions. *BMC Pregnancy and Birth,* 15:257. Available at: http://bmcpregnancychildbirth.biomedcentral.com/articles/10.1186/s12884-015-0685-y Accessed online 12/12/2015.

Mabelis, J. & Marryat, L. (2011). *Growing up in Scotland: Parental service use and informal networks in the early years.* Scottish Government: Edinburgh. Available at: http://www.gov.scot/Resource/Doc/350069/0117152.pdf Accessed online 20/11/2015.The

National Evaluation of Sure Start (NESS) Team, Institute for the Study of Children, Families and Social Issues. (2010). *The impact of Sure Start Local Programmes on seven year olds and their families.* Birkbeck, University of London. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/184073/DFE-RR220.pdf Accessed online 11/11/2015.

National Institute for Health and Care Excellence (NICE). (2005). *The effectiveness of public health interventions to promote the duration of breastfeeding: Systematic review*. Available at: https://www.nice.org.uk/proxy/?sourceUrl=http%3A%2F%2Fwww.nice.org.uk%2Fnicemedia%2Fdocuments%2Fbreastfeeding_evidencebriefing.pdf Accessed online 01/21/2015.

NICE. (2006). *Postnatal care up to 8 weeks after birth NICE guidelines [CG37]*. NICE, London. Available at https://www.nice.org.uk/guidance/cg37 Accessed online 15/09/2015.

NICE. (2008). *Maternal and child nutrition guideline [PH11]*. NICE, London. Available at: https://www.nice.org.uk/guidance/ph11Accessed online 20/08/2015.
NICE. (2010). *Pregnancy and complex social factors: a model for service provision for pregnant women with complex social factors. NICE guidelines [CG110]*. NICE, London. Available at: https://www.nice.org.uk/guidance/cg110 Accessed online 08/08/2015.

NICE. (2012). *Pregnancy and complex social factors: Evidence Update January 2012 A summary of selected new evidence relevant to NICE clinical guideline 110 'A model for service provision for pregnant women with complex social factors' (2010)* Available at: file:///C:/Documents%20and%20Settings/Administrator/My%20Documents/Downloads/Pregnancy_and_complex_social_factors_Evidence_Update_2012_FINAL[1]%20(1).pdf Accessed online 02/12/2015.

NICE. (2013). *Smoking cessation services NICE public health guidance 10 Issued: February 2008 last modified: November 2013.* Available at: http://www.nice.org.uk/proxy/?sourceUrl=http%3A%2F%2Fwww.nice.org.uk%2Fnicemedia%2Flive%2F11925%2F39596%2F39596.pdf Accessed online 29/09/2015.

Oakley, L., Maconochie, N. & Doyle, P. (2009). Multivariate analysis of infant death in England and Wales in 2005-06, with focus on social-economic status and deprivation. *Health Statistics Quarterly,* 42: 22-39.

O'Hara, M. & McCabe, J. (2013). Postpartum depression: current status and future directions, *Annual Review Clinical Psychology,* 9: 379-407.

Pawson, R., Greenhalgh, T., Harvey, G. & Walshe, K. (2004). *Realist synthesis: an introduction*. ESRC Working Paper Series. ESRC: London. Available at: http://www.ccsr.ac.uk/methods/publications/documents/RMPmethods2.pdf Accessed online 03/06/2015.

Pawson, R. & Tilley, N. (1997). *Realist Evaluation.* Sage Publications: London.

Reason, P. & Bradbury, H. (2001). *The SAGE Handbook of Action Research. Participative Inquiry and Practice. 1st Edition*. Sage Publications: London.

Pearson, R.M., Heron, J., Melotti, R., Joinson, C., Stein, A., Ramchandani, P.G., Evans, J. (2011) The association between observed nonverbal maternal responses at 12 months and later infant development at 18 months & IQ at 4 years; a longitudinal Study. *Infant behave dev,* 33(4): 525-33.

Rayment-Jones, H., Murrells, T. & Sandal, J. (2015). An investigation of the relationship between the caseload model of midwifery for socially disadvantaged women and childbirth outcomes using routine data – a retrospective, observational study. *Midwifery*, 31: 409-417.

Renfrew, M.J., Dyson, L., Wallace, L.M., D'Souza, L., McCormick, F., Spiby, H. (2005). Breastfeeding for longer: what works? *J R Soc Promot Health,* 125(2):62-3.

Ross, L.E. & Dennis, C-L, (2009). The prevalence of postpartum depression among women with substance use, an abuse history or chronic illness: a systematic review. *Journal of Women's Health,* 18: 475–86.

Rowe, R.E. & Garcia, J. (2003). Social class, ethnicity and attendance for antenatal care in the United Kingdom: a systematic review. *J Public Health Med.,* 25(2):113-9.

Sarafino, E. (1998). *Health Psychology. Biophysical Interactions.* New York, John Wiley & Sons Inc.

Schmied,V., Beake, S., Sheehan, A., McCourt, C., Dykes, F. (2011). Meta-synthesis of women's perceptions and experiences of breastfeeding support. *Birth: Issues in Perinatal Care,* 38: 49–60.

Shah, P.S. & Shah, J. (2010). Maternal exposure to domestic violence and pregnancy and birth outcomes: a systematic review and meta-analyses. *Journal of Women's Health,* 19: 2017–29.

Shaw J., Downe S. & Kingdon, C. (2015). Systematic mixed-methods review of interventions, outcomes and experiences for imprisoned pregnant women. *Journal of Advanced Nursing, 71(7):1451–1463.*

Small, R., Taft, A.J. & Brown, S.J. (2011). The power of social connections and support in improving health: lessons from social support interventions with childbearing women *BMC Public Health,* 11 (suppl 5): 54. Available at:

http://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-11-S5-S4 Accessed online 20/09/2015.

Islington Council (2015) *State of Equalities.* Available at: https://www.islington.gov.uk/publicrecords/library/Community-and-living/Information/Advice-and-information/2014-2015/(2015-01-30)-State-of-Equalities-Report-2015.pdf Accessed online 01/12/2015.

Tew, J., Gould, N., Abankwa, D., Barnes, H., Beresford, P., Carr, S., Copperman, J., Ramon S., Rose, D., Sweeney, A. & Woodward, L. (2006). *Values and methodologies for social research in mental health.* National institute for Mental Health in England and Social Perspectives Network in collaboration with the Social Care Institute for Excellence. Policy Press: Bristol.

Tyler, S. (2012). *Commissioning Maternity Services; A Resource Pack to support Clinical Commissioning Groups.* NHS Commissioning Board: A Special Health Authority: London. Available at https://www.england.nhs.uk/wp-content/uploads/2012/07/comm-maternity-services.pdf Accessed online 10/10/2015.

White, J., Thompson, L., Puckering, C., Waugh, H., Henderson, M., MacBeth, A., Wilson, P. (2015). Antenatal parenting support for vulnerable women. *British Journal of Midwifery*, 23(10): 724-732.

Yelland, J., Sutherland, G., Brown, S.J., (2010). Postpartum anxiety, depression and social health: findings from a population-based survey of Australian women. *BMC Public Health*, 10:771. Available at: http://www.biomedcentral.com/1471-2458/10/771 Accessed online 11/12/2025.