Caring to make a difference with vulnerable women: the impact of targeted support on birth-related outcomes and experiences

We report findings from a mixed-methods study to compare birth outcomes and experiences between vulnerable women who had or had not received targeted support from a specialist midwifery team and/or a third-sector organisation. Sociodemographic and birth-related outcome data from a 12-month birth cohort were used to explore differences between a) vulnerable and non-vulnerable women; and b) vulnerable women who had and those who had not received targeted support. Seventeen women who had or had not received targeted support were interviewed. Vulnerable mothers were significantly more likely to be younger, from a minority ethnic group, access care later in pregnancy and have a baby born earlier and at a lower birth weight. A higher percentage of women who received targeted support had a spontaneous birth, a vaginal presentation at birth and were less likely to use anaesthesia during labour when compared with unsupported vulnerable women. Targeted support was associated with reassurance, increased parental confidence and wellbeing. Key practice and policy-based implications are considered.

INTRODUCTION

Expectant or new mothers who are vulnerable due to complex psychosocial and economic challenges (such as being younger, from a minority ethnic background, experiencing domestic violence, or who abuse substances) are at risk of poor maternal and/or infant outcomes. These include an increased risk of preterm birth and low birth weight babies (National Institute for Health and Care Excellence [NICE] 2012), obstetric interventions and perinatal mental health issues (O’Hara and McCabe 2013). Vulnerable women are more likely to access maternity care later in their pregnancy (Lewis 2011), are socially isolated (NICE 2010) and are less likely to breastfeed (Oakley et al 2013). Furthermore, while women across the globe experience disrespectful and inadequate maternity care, this is particularly prevalent among vulnerable population groups (World Health Organization [WHO] 2015). Interventions designed to increase the health and wellbeing of vulnerable pregnant women have been introduced across the UK, such as NHS guidelines (NICE 2010), targeted midwifery (White et al 2015) and third sector support (McLeish and Redshaw 2015). To date, insights...
into the impact of targeted initiatives on birth-related outcomes are limited. There is also a lack of studies that compare birth outcomes and experiences between vulnerable women who do and those who do not receive targeted support.

In 2007, a vulnerable adults and babies midwifery team (VABMT) was established at Whittington Hospital, London, comprising a full-time safeguarding lead and two job-share midwives. All women with safeguarding concerns are referred to the VABMT. This service provides specialist support through: supporting midwives to create needs-based care plans; a 'meet and greet' service to signpost women and families to suitable support; and a 'one-stop' service for agencies and professions to contact about individual cases. The VABMT also provides direct support to women who have high complex needs (about six-10 women per midwife per year). This support involves all the woman's antenatal care, and on discharge, the woman's care plan is implemented by community midwives and other professionals or services. Women who are isolated or who lack social support are also referred to a charity that provides volunteer support to women with complex needs (BC). The volunteers offer support to women across the perinatal period, including help with writing birth plans, home visits, accompanying women to appointments, provision of essential practical items, doula services and breastfeeding support. All volunteers undergo a year of in-house training.

This study compares outcomes and experiences between vulnerable women who had and had not received targeted support from VABMT or BC. It aimed to identify the impact of needs-led support, and mechanisms through which optimal outcomes could be achieved.

**METHODOLOGY**

A mixed-methods study was undertaken. We obtained routinely collected socio-demographic and birth-related/outcome data for all women who birthed at the Whittington Hospital over a one-year period (1/7/2014-30/6/2015). Codes were linked to individual cases to identify women referred to the VABMT and type of support received (BC, VABMT, both or referred only). Data included:

- Socio-demographic: age, ethnicity, parity, number of previous pregnancies, gestational age at booking, smoking history.
- Birth-related/outcomes: type of labour onset, anaesthesia and/or medication administered, whether an episiotomy was performed, perineal tear, route of birth, outcome of birth, gestational age at birth, birth weight, length of hospital stay, Apgar scores and infant feeding method post-birth.

Inferential statistics were undertaken to compare socio-demographic and birth-related/outcome data between vulnerable and non-vulnerable women. Independent samples t-tests were performed on continuous variables and chi-square tests for association for nominal/categorical variables. Descriptive analyses only (due to low cell counts) compared differences in the 'vulnerable only' sub-sample (those who had/had not received additional support).

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Semi-structured interviews were undertaken with women who had/had not received targeted support. Interviews were undertaken in the first postnatal week to explore women's experiences of perinatal support. Interviews took between 20-48 minutes to complete and were audio-recorded, transcribed and thematically analysed (Braun and Clark 2006).

Ethics/governance approval was obtained from an NHS committee, Whittington Hospital and the lead author's University.

**RESULTS**

**QUANTITATIVE DATA**

We collected data on 3,511 women: 315 (8.9 per cent) had been referred to the VABMT and 24 (7.6
per cent) received targeted support (BC (n=5); VABMT (n=14); BC+VABMT (n=5)).

Comparisons between vulnerable (n=315) vs non-vulnerable (n=3,196) women revealed vulnerable women were significantly more likely to be: younger (t(360.68)=-3.23, p=0.001); from a BME ethnic group (X²(1)=12.53, p<0.001); to attend a later booking appointment (t(347.45)=3.31, p=0.001); to be a current/previous smoker (X²(1)=64.12, p<0.001); to have a baby born at an earlier gestational age (t(385.62)=-3.90, p<0.001) and a lower birth weight (t(381.71)=-6.05, p<0.001); and had a longer postnatal stay (t(329.38)=5.25, p<0.001). Vulnerable women were also significantly less likely to experience a perineal tear (X²(1)=7.31, p<0.001) and to have initiated breastfeeding (X²(1)=34.77, p<0.001). No other significant differences/relationships were identified.

Descriptive analyses within the vulnerable only sub-sample (n=315) revealed that a higher percentage of those who received targeted support (n=24) compared to those referred only (n=291) had: a spontaneous birth (62.5 per cent vs 50.9 per cent); a vaginal presentation at birth (79.2 per cent vs 66.7 per cent); and a longer (4+ days) postnatal stay (66.7 per cent vs 37.6 per cent). Those who received targeted support were also less likely to have used anaesthesia during the birth (54.2 per cent vs 64.6 per cent). Whilst women who received additional support were less likely to have breastfed post-birth (54.2 per cent vs 81.4 per cent), a higher percentage of women supported by BC initiated breastfeeding when compared with those supported by VABMT only (70 per cent vs 42.8 per cent).

QUALITATIVE DATA

Seventeen women were interviewed; 11 received support from either BC (n=5), BC+VABMT (n=4) or VABMT (n=2), and six were referred only. We drew on Sarafino's (1998) five-category support schema (informational, instrumental, emotional, esteem and network) to organise the data and highlight differences in the type/quality of support received.

1. Informational and instrumental support

This highlights how women who received targeted support accessed needs-led information and responsive care from consistent caregivers: 'it was all about me - what I wanted and needed'. Flexible antenatal appointments were provided by VABMT, and BC offered repeated visits, continual presence during birth and visited/stayed with women for protracted periods. Accessible and flexible support endowed women with a sense of reassurance and wellbeing:

'She's staying with me and doing massage to me every day and asking me how you feel, would you like me to bring anything? It's so amazing, I can't find a word in my heart to say how happy it made me.' (Gina: BC+VABMT)

The charity (BC) helped women address practical challenges such as infant feeding and self care. Invaluable material items were also provided, such as breast pumps, phone 'top ups', baby clothes and other baby items. The BC operated to ensure that women had what they needed when they needed it:

'She brought pushchair, this, that, clothes, you know, everything. [...] They [BC] understand when you have nothing, it's very hard.' (Mandy: BC)

Conversely, women who were referred only often received care from multiple care-givers. A lack of continuity and restricted opportunities to form women-provider relationships created problems through women not making emotional-based disclosures; 'I didn't want to let my guard down', communication difficulties through not knowing the women's history, and women not always receiving what they considered to be the 'right support'.

2. Emotional and esteem support
This illuminates emotional-based appraisals of perinatal support. Some women who were referred only had received positive maternity support: ‘the team [midwifery] were amazing’; while others experienced judgemental and insensitive care: ‘And they [midwives] spend all their time just talking and winding you up and not actually doing anything to improve your wellbeing or trying to understand you’. (Fiona)

Those who received additional support described positive relationships with BC/VABMT staff, and valued the non-judgemental care received: ‘she [VABMT] knows me as a person’; ‘you can chat to BC about anything, they don’t judge you’. The calming presence of a BC volunteer, and sensitive midwifery care, enabled women to feel in control and to achieve a positive birth: ‘She [BC] was constantly telling me how well I was doing. She made me feel positive and not stressed. I wouldn’t have been able to do it without her’ (Louise: BC)

The BC support helped some women sustain healthier lifestyles and to develop confidence as a parent - women felt nurtured by the familial approach provided: ‘it’s like your family. I never ever had that in my life’.

3. Network support

This highlights how most women had experienced ‘negative’ and ‘critical’ support from wider service providers. The BC and VABMT staff operated as advocates to ensure women accessed/received the support they needed. This involved booking/accompanying women to appointments, facilitating meetings and coordinating follow-up. Women also appreciated being signposted to local agencies for additional resources and support:

‘She [BC] called the British Red Cross for me. They gave me £60 - that was helping me as well.’ (Mandy: BC)

Overall, some women had supportive family and friends, but others had no, limited and/or negative personal networks. Women valued social contacts provided by BC, as they offered companionship, reduced their sense of loneliness and made them feel cared for: ‘it was like one angel, come only for me’.

DISCUSSION

We identified that vulnerable women and their infants, when compared to a general childbearing population, face poorer outcomes through negative public health behaviours, prematurity and low birth weight. Vulnerable mothers who received targeted support were more likely to experience positive outcomes, such as reduced use of anaesthesia, a vaginal presentation at birth and breastfeeding. These findings support wider literature, in that women with complex needs are at higher risk of adversity (Lewis 2011), and that needs-led support can facilitate salutary outcomes (McLeish and Redshaw 2015).

Conclusions about the effectiveness of additional support are difficult, due to the small samples involved. However, the qualitative data provided meaningful insights into how optimal outcomes can be achieved. The complementary partnership between BC and the VABMT enabled holistic support that encompassed flexible, accessible and needs-led care, trust-based relationships, continuous doula support and postnatal support that extended far beyond midwifery care. This support evinced strong satisfaction among women, with the extended offer from BC suggested to have a positive impact on babies' wellbeing (Clewett and Pinfold 2015). In contrast, those who did not receive additional support were often isolated, unable to access essential items, and reported negative experiences of maternity services due to a lack of trust, poor communication and judgemental and insensitive care.

Around 5 per cent of women are estimated to have experienced extensive physical/sexual abuse
across their life course; these experiences are likely to co-exist with other vulnerability factors such as poverty, physical/mental ill health and substance misuse (Scott and McManus 2016). The health inequalities faced by vulnerable mothers, particularly those from deprived communities, are highlighted in the recent UK-based maternity review (NHS England 2016). In our study, only a very small percentage of women with the highest level of vulnerability accessed targeted support, a situation reflective of resources rather than need. The most optimal approach to maternity care is 'proportionate universalism' where actions are population-based but with a 'scale and intensity that is proportionate to the level of disadvantage' (Marmot 2010: 16). While targeted support appears effective in reducing inequalities and improving outcomes, this is arguably unrealistic for all who need it in our current economic climate. However, women's negative experiences of maternity care reflect the need for universal sensitive and non-judgemental care from maternity care providers. This requires adequate training for healthcare practitioners on the needs of vulnerable women, and a model of midwifery care based on continuity of care and support from other agencies as appropriate (NHS England 2016). An approach that acknowledges how traumatic experiences impact negatively in the perinatal period is growing, and examples of trauma-informed practice in maternal health show promise (Seng and Taylor 2015).

**Study limitations**

We were unable to collect/compare further insights into women's use of maternity care (such as attendance at antenatal appointments), due to incompatible IT systems and insufficient study resources. As referrals into the VABMT were collected on separate data-recording systems, we had to rely on manual checks to identify vulnerable women within the birth-related/outcome data set. It is therefore possible that the number of vulnerable women reported is an under-representation. However, as we collected and analysed data from a full 12-month birth cohort this enhanced the robustness of our findings. A further strength is that the voices of hard-to-reach women, often silenced in research, were captured to elicit what matters most.

Further research is required with larger and more robust data sets, and prospective studies to explore long-term impact. Overall, however, this study enabled important insights into the needs of some of society's most vulnerable perinatal women, how best these needs might be addressed and the improved outcomes associated with targeted support, particularly when delivered through a partnership between specialist midwives and a voluntary sector organisation.

**REFERENCES**


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