

PROJECT 20: MODELS OF MATERNITY CARE FOR WOMEN  
WITH LOW SOCIOECONOMIC STATUS AND SOCIAL RISK  
FACTORS:  
WHAT WORKS, FOR WHOM, IN WHAT CIRCUMSTANCES,  
AND HOW?



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# Social risk factors associated with poor birth outcomes

Low socioeconomic status

Black and minority ethnicity

Women in prison

Homelessness

Refugee/asylum seeker

Non-native language speakers

Victims of abuse

Sex workers

Young mothers

Travelling community

Social isolation

Single Mothers

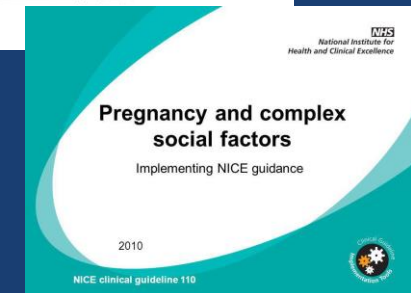
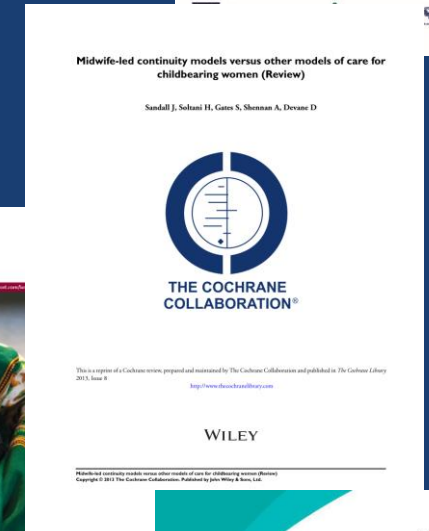
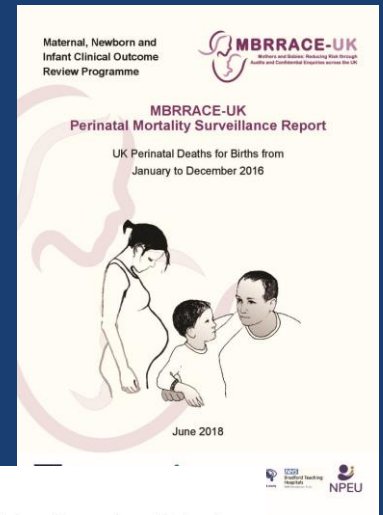
Mental health illness

Physical/emotional/learning disabilities

Victims of female genital mutilation

HIV Positive status

Substance and/or alcohol users



# Research Aim and Objectives

To explore what models of maternity care improve clinical outcomes and experiences for women and infants living socially complex lives, and how.

- Gather information on what is believed to improve women's outcomes and experiences
- Develop theories to explain how specialist models of care are supposed to work
- Evaluate two specialist models of care to test theories
- Refine theories using findings and develop an evidence-based model of care



# Methods

## Realist Evaluation

### Realist Synthesis



22 papers, maternity care experiences of 936 women with social risk factors

### Birth outcome data



1000 women  
Multinomial logistic regression

### Focus Groups with midwives



11 specialist midwives  
Thematic analysis

### Interviews with women



20 women with social risk accessing specialist model of care  
28/40, 36/40 and 6 weeks postnatal  
Thematic framework analysis

# Findings- Realist Synthesis

- Access
- Education
- Interpretation
- Support vs surveillance
- Continuity of care
- Trust (in HCP and the wider service) Discrimination

*‘It is safer not to ask for help, you'd better Google rather than ask midwives... I didn't want them thinking, ‘Oh, she can't do it’ (McLeish et al, 2019)*

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ORIGINAL ARTICLE

Check for updates

WILEY

**How do women with social risk factors experience United Kingdom maternity care? A realist synthesis**

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**Abstract**  
**Background:** Echoing international trends, the most recent United Kingdom reports of infant and maternal mortality found that pregnancies to women with social risk factors are over 50% more likely to end in stillbirth or neonatal death and carry an increased risk of premature birth and maternal death. The aim of this realist synthesis was to uncover the mechanisms that affect women's experiences of maternity care.  
**Methods:** Using realist methodology, 22 papers exploring how women with a wide range of social risk factors experience maternity care in the United Kingdom were included. The data extraction process identified contexts (C), mechanisms (M), and outcomes (O).  
**Results:** Three themes, Resources, Relationships, and Candidacy, overarched eight CMO configurations. Access to services, appropriate education, interpreters, practical support, and continuity of care were particularly relevant for women who are unfamiliar with the United Kingdom system and those living chaotic lives. For women with experience of trauma, or those who lack a sense of control, a trusting relationship with a health care professional was key to regaining trust. Many women who have social care involvement during their pregnancy perceive health care services as a system of surveillance rather than support, impacting on their engagement. This, as well as experiences of paternalistic care and discrimination, could be mitigated through the ability to develop trusting relationships.

# Evaluation of two specialist models of care



Community Health Centre

- All women from local community receive specialist model
- Set in area of deprivation
- Women cared for by whole team



Large Inner-city Hospital

- Women with social risk factors are referred to specialist model
- Hospital based with large catchment area
- Women have one named midwife



# Findings- Focus Groups with midwives

- Guiding women through fragmented system
- Compassionate care and emotional investment
- Chasing appointments and test results leads to timely, appropriate intervention
- Trusting relationship leading to increased disclosure
- Needs-led care and support can improve child protection outcomes

*'We've definitely had a few women that we've thought are not really a concern, like they might have come to us because of mild mental health, and that's all we know about their history. And then actually it's not until 25, 28 sometimes later weeks that they say, 'Actually I'm in this really abusive relationship, or, 'Actually I am technically homeless'. I think it's the, the building of trust...I think by then they feel maybe comfortable enough to disclose what they feel they need to. (CBM3)'*



# Findings – Access and engagement

- Inequalities appear to have been mitigated by the community-based specialist model
- Deprivation score = social risk factors
- Hospital based care= late booking, less likely to have the recommended number of appointments and appointments with a known healthcare professional
- Specialist model= more likely to be looked after in labour by a known midwife

Qualitative data revealed mechanisms for improved access and engagement including self-referral, relational continuity with a small team of midwives, flexibility, and situating services within deprived community settings.

*‘the fact that I see someone regularly. I feel like I’m being looked after as well... I can rely on them to look after me, remind me of appointments and stuff like that as I really struggle ... [the midwives] text, call, put it in my notes and what-not so ...I am remembering ... or I do actually go to these appointments... whereas my other midwife appointments [under standard care] were just the normal basic appointments...I was visiting hospital more [because] when I did try to get in contact with someone it was impossible, so I just had to keep running to the hospital.’(CBM1)*



# Findings- Birth outcomes

The specialist model of care, and in some cases the group practice model, appear to offer protection against the poorer outcomes expected with standard care.

Women who received standard maternity care were:

- less likely to use water for pain relief in labour (RR 0.11, CI 0.02–0.62)
- have skin to skin contact with their baby (RR 0.34, CI 0.14–0.80)

Antenatal care based in the hospital setting was associated with:

- increased preterm birth (RR 2.38, CI 1.32–4.27) and low birth weight (RR 2.31, CI 1.24–4.32)
- preterm birth was increased further for women with the highest level of social risk (RR 3.11, CI 1.49–6.50)
- decreased induction of labour (RR 0.65, CI 0.45–0.95)

RESEARCH ARTICLE

## Project20: Does continuity of care and community-based antenatal care improve maternal and neonatal birth outcomes for women with social risk factors? A prospective, observational study

Hannah Rayment-Jones<sup>1\*</sup>, Kathryn Dalrymple<sup>1</sup>, James Harris<sup>2</sup>, Angela Harden<sup>3</sup>, Elidh Parslow<sup>4</sup>, Thomas Georgi<sup>5</sup>, Jane Sandall<sup>1</sup>

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OPEN ACCESS

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## Abstract

### Background

Social factors associated with poor childbirth outcomes and experiences of maternity care include minority ethnicity, poverty, young motherhood, homelessness, difficulty speaking or understanding English, migrant or refugee status, domestic violence, mental illness and substance abuse. It is not known what specific aspects of maternity care work to improve the maternal and neonatal outcomes for these under-served, complex populations.

### Methods

This study aimed to compare maternal and neonatal clinical birth outcomes for women with social risk factors accessing different models of maternity care. Quantitative data on pregnancy and birth outcome measures for 1000 women accessing standard care, group practice and specialist models of care at two large, inner-city maternity services were prospectively collected and analysed using multinomial regression. The level of continuity of care and place of antenatal care were used as independent variables to explore these potentially influential aspects of care. Outcomes adjusted for women's social and medical risk factors and the service attended.

### Results

Women who received standard maternity care were significantly less likely to use water for pain relief in labour (RR 0.11, CI 0.02–0.62) and have skin to skin contact with their baby shortly after birth (RR 0.34, CI 0.14–0.80) compared to the specialist model of care.

# Findings- Mechanisms for improving health inequalities

- Standard maternity care associated with stigma, discrimination and paternalistic care
- Practical and emotional support from known midwives led to increased disclosure and eased perceptions of surveillance
- Evidence-based information enabled active participation
- Continuity of care reduced women's anxiety, enabled the development of a supportive network and improved women's ability to seek timely help.
- Specialist model midwives knew women's' medical and social history, improving safety.
- Care set in the community by a small team of midwives appeared to enhance these benefits.

*'...they are invested in you and in kind of how things go and the outcome and not just the numbers side of things, like, 'Oh baby's heart is beating,' but also like, 'How are you?'... 'How are you coping with all of it?' And I think when you feel valued that perhaps you take more in. It's like if people give you advice and it's someone you don't know you're like, 'hm, whatever'. But if it's someone you know and someone you value... I think that sticks more.'* (CBM9)

# Findings-Interpreter Services

- difficulties accessing maternity services
- a lack of choice and no interpreter offered for emergency or intrapartum care
- suspicion around levels of confidentiality and quality
- preference for a trusted family member or friend to interpret
- undisclosed risk factors and concerns
- disengagement from care

*'...They will say what you didn't say to them....so that's why personally I don't like it, I stop it... it's not fair you see getting money, if [interpreter] doesn't know the language, it's better to say, 'OK I can't deal with that one.' Because in order to get money, don't put somebody's life at risk.'* (CBM4)

Rayment-Jones et al. *Int J Equity Health* (2021) 20:233  
<https://doi.org/10.1186/s12939-021-01570-8>

International Journal for  
Equity in Health

## RESEARCH

## Open Access

### Project20: interpreter services for pregnant women with social risk factors in England: what works, for whom, in what circumstances, and how?

Hannah Rayment-Jones<sup>1\*</sup>, James Harris<sup>2</sup>, Angela Harden<sup>3</sup>, Sergio A. Silverio<sup>1</sup>, Cristina Fernandez Turienzo<sup>1</sup> and Jane Sandall<sup>1</sup>

#### Abstract

**Background:** Black and minority ethnic women and those with social risk factors such as deprivation, refugee and asylum seeker status, homelessness, mental health issues and domestic violence are at a disproportionate risk of poor birth outcomes. Language barriers further exacerbate this risk, with women struggling to access, engage with maternity services and communicate concerns to healthcare professionals. To address the language barrier, many UK maternity services offer telephone interpreter services. This study explores whether or not women with social risk factors find these interpreter services acceptable, accessible and safe, and to suggest solutions to address challenges.

**Methods:** Realist methodology was used to refine previously constructed programme theories about how women with language barriers access and experience interpreter services during their maternity care. Twenty-one longitudinal interviews were undertaken during pregnancy and the postnatal period with eight non-English speaking women and their family members. Interviews were analysed using thematic framework analysis to confirm, refute or refine the programme theories and identify specific contexts, mechanisms and outcomes relating to interpreter services.

**Results:** Women with language barriers described difficulties accessing maternity services, a lack of choice of interpreter, suspicion around the level of confidentiality interpreter services provide, and questioned how well professional interpreters were able to interpret what they were trying to relay to the healthcare professional during appointments. This resulted in many women preferring to use a known and trusted family member or friend to interpret for them where possible. Their insights provide detailed insight into how poor-quality interpreter services impact on their ability to disclose risk factors and communicate concerns effectively with their healthcare providers. A refined programme theory puts forward mechanisms to improve their experiences and safety such as regulated, high-quality interpreter services throughout their maternity care, in which women have choice, trust and confidence.

**Conclusions:** The findings of this study contribute to concerns highlighted in previous literature around interpreter services in the wider healthcare arena, particularly around the lack of regulation and access to high-quality interpretation. This is thought to have a significant effect on pregnant women who are living socially complex lives as they are

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# Findings- Mental Health support

Women receiving standard maternity care were:

- less likely to be referred to mental health services (RR 0.14 CI 0.04-0.44), early/enhanced health visitor and family nurse partnership schemes (RR 0.02 CI 0.00-0.11) and social care (RR 0.09 CI 0.02-0.33).

Mechanisms leading to improved disclosure: support and access to treatment: early and flexible access, information and choice, continuity of care, perceptions of surveillance and the establishment of support networks. Women only felt comfortable to disclose concerns after a level of trust had been developed due to the fear of referral to social care and removal of their children.

*‘there was a couple of things where I was like, ‘I have to give you background on this,’ and I never felt like I was like, wasting anyone’s time...I feel confident about it [disclosing sensitive information] because, um, when I first...talked about how I was starting to feel a certain way...and then ultimately she referred me...I was like, don’t take my baby off me, kind of thing... she spent that time with me, you know, explaining why, how the process works, confidentiality.’ (CBM9)*



## Evidence-based model of care

- Set in area of deprivation
- Community-based care
- Midwives know the community
- AN, IP, PN continuity from team
- 24/7 access to team
- Team of midwives known to woman
- Early access (inc self-referral)
- Flexible, needs-led care
- Referral to local services
- Seamless communication with MDT
- Regulated, high quality interpretation services across maternity care pathway



# Future research recommendations

- Evaluation of evidence-based MOC in different contexts
- Could specialist care address longer-term outcomes and influences of social deprivation such as: Child protection outcomes, maternal-infant bonding, breastfeeding rates, childhood obesity and general health, engagement with early years?
- Further exploration of the impact of place-based maternity care on neonatal outcomes
- Further testing of association between maternity care mechanisms and pre-birth stress
- Explore causal mechanisms for Black, Asian and minoritized ethnic women's inequalities





# My experience of a specialist model of care

Arooj Rehman

Service user





# Implementing a specialist model of care for women with social risk factors



Victoria Cochrane

Director of Midwifery & Gynaecology at Chelsea and Westminster

NHS Foundation Trust



## Links to findings papers:



Rayment-Jones H, Harris J, Harden A, Khan Z, Sandall J. How do women with social risk factors experience United Kingdom maternity care? A realist synthesis. Birth. 2019 Sep;46(3):461-74. <https://onlinelibrary.wiley.com/doi/full/10.1111/birt.12446>



Rayment-Jones H, Silverio SA, Harris J, Harden A, Sandall J. Project 20: Midwives' insight into continuity of care models for women with social risk factors: what works, for whom, in what circumstances, and how. Midwifery. 2020 May 1;84:102654. <https://www.sciencedirect.com/science/article/pii/S0266613820300279>

Rayment-Jones H, Dalrymple K, Harris J, Harden A, Parslow E, Georgi T, Sandall J. Project20: Does continuity of care and community-based antenatal care improve maternal and neonatal birth outcomes for women with social risk factors? A prospective, observational study. PloS one. 2021 May 4;16(5):e0250947. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0250947>

Rayment-Jones H, Harris J, Harden A, Silverio SA, Turienzo CF, Sandall J. Project20: interpreter services for pregnant women with social risk factors in England: what works, for whom, in what circumstances, and how?. International journal for equity in health. 2021 Dec;20(1):1-1. <https://equityhealthj.biomedcentral.com/articles/10.1186/s12939-021-01570-8>

