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

Final Report

Jennifer Hollowell[1], Laura Oakley[1], Carol Vigurs[2], Elaine Barnett-Page[2], Josephine Kavanagh[2] and Sandy Oliver[2]

[1]National Perinatal Epidemiology Unit, University of Oxford

[2]EPPI-Centre, Social Science Research Unit, Institute of Education, University of London

October 2012

Contents

Figures

Tables

Acknowledgements

Advisory Group Membership

Ginny Brunton	Research Officer, EPPI-Centre, Social Science Research Unit, Institute of Education, London
Jill Demilew	Consultant Midwife, King's College Hospital Foundation Trust
Gill Gyte	Research Associate, Cochrane Pregnancy and Childbirth Group, Division of Perinatal and Reproductive Medicine, University of Liverpool
Angela Harden	Professor of Community and Family Health, Institute for Health and Human Development, University of East London
Ron Gray	Consultant Clinical Epidemiologist, NPEU, University of Oxford
Roz Ullman	Senior Research Fellow, National Collaborating Centre for Women's and Children's Health, London

Department of Health representative

Zoltan Bozoky	Senior Principal Research Officer (Maternal, Child, Adolescent and Family Health), Policy Research Programme

Executive summary

Background

Antenatal care is considered to be effective in improving outcomes for pregnant women and their babies. Booking for antenatal care before 12 weeks gestation is recommended to ensure that women do not miss interventions, monitoring and screening that might benefit their health and that of their babies. However, although the vast majority of women in the UK book within the first 12 weeks of pregnancy, the proportion is substantially lower in a number of socioeconomically disadvantaged groups and in Black and Minority Ethnic (BME) groups.

A recent review of the effectiveness of interventions to increase the early initiation of antenatal care by disadvantaged and vulnerable groups of women in identified a number approaches that might be used or adapted to increase early initiation of antenatal care but the applicability of many of the interventions to the UK context was unknown.

This study aims to build on the findings of the previous systematic review of effectiveness. It uses the qualitative literature exploring the views and experiences of disadvantaged and vulnerable groups of women in the UK to contextualise and further explore the findings of the earlier review. It addresses the following question:

> *What are the barriers to and facilitators of early initiation of antenatal care in socially disadvantaged and vulnerable women in the UK and to what extent do the interventions identified in the earlier effectiveness review address these?*

Aims

The aims of the present study are:

- to identify and describe the barriers to and facilitators of early initiation of antenatal care in socially disadvantaged and vulnerable women in the UK; and

- to explore the extent to which interventions identified in a related effectiveness review address these.

The main focus of the review is on Black and Minority Ethnic (BME) women.

Methods

The study was a mixed methods review involving the following stages:

Initial scoping review

We systematically searched bibliographic databases and other sources to identify published research on disadvantaged and vulnerable UK women's views about antenatal care. We included peer

reviewed articles and reports from the grey literature, focusing primarily on research that addressed the following questions:

- What are disadvantaged women's views, understandings and experiences of antenatal care?
- What do women say influences their decisions to attend or not attend antenatal care?
- What are women's views about changes that may help them attend antenatal care?

Basic descriptive information about the eligible studies was abstracted and used to prepare a descriptive overview of the relevant literature reporting women's views of their feelings and experiences (the 'views literature').

In-depth thematic analysis

Following the scoping review, it was decided to focus on sub-set of views studies that had included BME women in the UK and related groups such as recent migrant and women without English as their first language.

Two reviewers systematically appraised the quality of the eligible studies using a published quality assessment tool. Studies that met a minimum standard of reliability and usefulness were included.

Themes were identified from women's views reported in those studies considered at least moderately reliable and moderately useful, using the EPPI Reviewer 4 thematic synthesis software to manage the data. These themes then provided a framework within which barriers were identified, paying greatest attention to those barriers that were explicitly related to initiation of care. It also included barriers which could readily be inferred from evidence relating to structural or material circumstances either before their booking appointment or later in pregnancy. Evidence relating to antenatal classes was excluded. Evidence presented as study authors' interpretations alone was distinguished from evidence presented with the support of direct quotes from women.

Cross-study synthesis

The cross-study synthesis focused on a group of interventions included in an earlier systematic review of interventions to increase the early initiation of antenatal care in disadvantaged and vulnerable groups of women. The aim was to identify the approaches used in these interventions that 'meshed' with the barriers and facilitators experienced by BME women in the UK.

Two reviewers assembled descriptive information about the interventions by contacting the authors, where possible, and searching for supplementary reports, intervention websites, etc.

A multi-stage approach - with each step involving independent review by two reviewers followed by discussion and agreement - was then used to identify 'relevant ' elements of each intervention and to develop and agree a synthesis matrix summarising the approaches used in the included interventions to address the barriers to early initiation of antenatal care that had been found to be experienced by BME women in the UK.

Main findings

Results of the scoping review

We identified 72 views studies conducted in disadvantaged and vulnerable groups of women in the UK. These studies included women with experience of female genital mutilation, women without English as a first language, women with experience of domestic violence, women from BME groups, women from lower socioeconomic groups, recent immigrants, refugees or asylum seekers, women with experience of substance misuse, young/teenage women, and a range of other vulnerable groups.

Results of the in-depth review of barriers and facilitators

We identified 36 views studies related to the experiences of BME women and related groups of which 21 met the minimum quality criteria for inclusion in the in-depth views' synthesis.

A thematic analysis of women's views identified four domains of factors influencing initiation of antenatal care: structural and material life circumstance; the care pathway for pregnant women; individual knowledge, culture motivation and beliefs; and family and social circumstances.

The main barriers to early initiation of antenatal care by BME women in the UK appeared to be, or arose from:

- The complexity and, in some cases unfamiliarity, of the UK healthcare system to the women themselves; lack of appreciation - on the part of healthcare professionals and others in contact with pregnant women - that women may lack the knowledge to make appropriate use of services or may lack the knowledge and/or assertiveness to ask for the information that they need; failure to address the need for information to be provided proactively.
- In some BME groups: lack of knowledge regarding the purpose and importance of antenatal care; perception that pregnancy is natural and that medical intervention is not necessary or appropriate; concern that some interventions (screening) may be harmful; belief that pregnancy is a private matter.
- Preference for local services; 'unwillingness' and, in some cases, lack of resources to travel to services outside the local community.
- Women's perception that healthcare professionals do not or will not treat them respectfully and sensitively as individuals with complex needs, or provide adequate emotional support. This perception arises in part from the failure of healthcare staff to appreciate or address the disempowering effect of language and communication problems. For example, women may not be given time to express themselves and may not be encouraged, or provided with the support needed, to ask questions and exercise control over their care.
- Failure to provide professional interpreters when needed; inappropriate reliance on family members, including children, to translate/interpret.
- Concern that cultural preferences for female healthcare staff may not be respected; lack of awareness of the right to request a female GP.
- Asylum seekers, and sometimes refugees, experience *additional* barriers arising from:

o   Lack of a fixed address and dispersal policies affecting ability to register with a GP

o   Lack of cash to pay for travel to appointments and to buy food if appointments result in missed hostel meals

o   Healthcare professionals' lack of knowledge regarding asylum seekers' (and refugees') rights and entitlements; women's lack of knowledge about their rights to receive healthcare

o   Women's concerns that accessing healthcare may affect the outcome of their applications for asylum/refugee status

Results of the cross-study synthesis

Systematic examination of the characteristics of a set of existing interventions targeting disadvantaged and vulnerable groups of women identified a number of approaches that 'meshed' with the identified barriers to antenatal care experienced by BME women in the UK. The evidence that these interventions were effective in increasing early initiation of antenatal care in other populations was, however, weak.

The following approaches appeared to address one or more of the barriers affecting UK BME women:

Lack/Inaccessibility of local services

- Local services provided by outreach workers (e.g. 'resource mothers' , advocates, case managers)

- Mobile women's health van

- Help with transportation to antenatal care appointments

- Provision of a 'neighbourhood' (local) antenatal clinic

Difficulties navigating services/ information has to be sought out not offered/women's lack of knowledge of services/women's lack of knowledge regarding purpose of care and choices available

- Proactive 'case finding' followed by assistance entering/navigating health care system

- 'Resource mothers' or other outreach workers, with or without an advocacy role, typically providing ongoing advocacy/support throughout pregnancy as well as information, education and help with referral

System that is insensitive/indifferent or impersonal

- Outreach/community-based workers (including advocates, resource mothers, home visitors) trained to provide emotional/social support and/or a sensitive, personalized service, sometimes on an ongoing basis throughout pregnancy and after birth

- Clinics targeting needs of a specific group of women

Values, beliefs and cultural preferences

- Outreach workers (including advocates, resource mothers, home visitors) recruited from the target population and hence likely to share values and beliefs

- Staff trained in and/or recruited for cultural sensitivity

- Education, typically provided by outreach workers, to help women understand the purpose of antenatal care and the need for medical care during pregnancy

Language/communication barriers

- Bilingual linkworkers

- Bilingual outreach workers and/or services staffed by bilingual healthcare staff

- Advocates attending healthcare consultations to help women overcome language and communication problems

- Assistance with form filling, etc for women with limited literacy

Additional barriers affecting asylum seekers and refugees

- 'Case finding' and outreach services might be used to reach and help asylum seekers access antenatal care, but none of the approaches specifically addressed the additional needs of asylum seekers and refugees.

Conclusions

Our findings identify a range of barriers to early initiation of antenatal care experienced by BME women in the UK and suggest interventions and approaches that might be used to address some of these.

Our findings suggest that

- There is a need to actively promote the existence, purpose and benefit of continuous antenatal care in a culturally appropriate way to the populations most at risk of late booking.

- The complexity of the system does not facilitate early presentation for continuous antenatal care, especially by BME women who are unfamiliar with such a system and women with limited English. Healthcare staff in contact with pregnant BME women, particularly recent migrants and women who do not have English as their first language, need to be more aware of the need to proactively provide information to women in a way that women can understand.

- BME women, who lack English as their first language or are recent migrants, may not fully or adequately understand information and advice provided during GP or other consultations and may be reluctant or unable to seek information that they need. The involvement of lay or professional advocates, or the adoption of an advocacy role by existing staff, might improve the quality and effectiveness of communication.

- There is a need for GP and maternity services to consider how best to accommodate BME women's cultural preferences for female healthcare staff and to be aware that women may lack the confidence an assertiveness to request such services if they are not actively offered.

- Women's experiences suggest a lack of cultural sensitivity/competence on the part of service providers

- Women who are asylum seekers, and in some cases refugees, face additional barriers, some of which might be better addressed through national initiatives and policies.

Many of the 'promising' approaches identified would require further development and testing before they could be implemented and/or evaluated in the NHS. It would be useful to explore whether there are existing examples of these approaches in current use in the NHS.

1 Introduction

In October 2007, the National Perinatal Epidemiology Unit (NPEU) was commissioned by the Department of Health to undertake a programme of work to help strengthen the evidence base on health service and public health interventions, relevant in the context of the NHS, to reduce infant mortality and narrow the health inequalities gap.

As part of that programme of work, the NPEU carried out a systematic review of the effectiveness of interventions to increase the early initiation of antenatal care in socially disadvantaged and vulnerable groups of women[1]. The review, which specifically focused on interventions of potential relevance to the NHS, included evaluations of sixteen interventions, but found the overall quality of the evidence to be poor. The included interventions targeted only a few groups of disadvantaged and vulnerable women (pregnant teenagers, selected BME group, and women of low socio-economic status (SES)); and no relevant evidence was identified for many other vulnerable groups (e.g. homeless women, Travellers, refugees, substance and alcohol misusers, women with mental health problems or learning disabilities). Additionally, most of the interventions targeted and were evaluated in low income, US populations. Nevertheless, the review did identify a number of promising interventions potentially relevant to the UK context which might have an impact on early initiation of antenatal care.

The present study was commissioned by DH to build on the findings of the previous systematic review of effectiveness. This mixed-methods review will use the qualitative literature exploring the views and experiences of disadvantaged and vulnerable groups of women in the UK to contextualise the findings of the earlier review. The review addresses the following question:

> *What are the barriers to and facilitators of early initiation of antenatal care in socially disadvantaged and vulnerable women in the UK and to what extent do the interventions identified in the earlier effectiveness review address these?*

2 Background

Antenatal care is considered to be effective in improving outcomes for pregnant women and their infants. Delayed initiation and/or inadequate care may result in women being denied interventions, monitoring and screening which may benefit their health and that of their infants (NICE 2008).

In the UK, routinely collected data suggests that under utilisation of antenatal care is more common among pregnancies affected by neonatal death and maternal death compared to pregnancies unaffected by these outcomes[2][3].

Guidelines produced by the National Institute of Clinical Excellence[4] state that antenatal care should be initiated by 10 weeks gestation, and recommend that primiparous and multiparous women with uncomplicated pregnancies receive a minimum of 10 and 7 antenatal checks respectively[4]. In 2006 a UK survey found that only 56% of women had a booking appointment by 12 weeks gestation[5]. A

repeat survey conducted in 2010 found that the proportion booking by 12 weeks had increased to 86% but found substantially lower rates of first trimester booking in Black and Minority Ethnic (BME) groups, women in the most socioeconomically disadvantaged areas and single mothers[6]. In the UK, later initiation of antenatal care has been found to be associated with socio-demographic factors such as lower socio-economic class[7] and/or residence in a socioeconomically disadvantaged area[6] non-white ethnicity[6 7], younger age[8], smoking[8], non-UK place of birth [9], and single status (not married or cohabiting)[6 9]. These associations, and others, have been confirmed in studies conducted in other developed countries[10-16].

In the UK, women from a BME background form a substantial minority of maternity service users. Self-reported maternal ethnicity has been collected through the Hospital Episode Statistics (HES) system in England since 1995. For the 91% of records in 2009 where a maternal ethnicity was recorded, 31% of deliveries were to BME women. This overall figure masks a wide regional variation, for example in the London area the figure was 66% [17]. Maternal country of birth is collected through the birth registration process. In 2011, one in four live births in England and Wales were to women born outside the UK [18].

Of the maternal deaths occurring in the UK between 2006-08 reviewed by the Centre for Maternal and Child Enquiries (CMACE), 31% of deaths due to maternal causes were to women from non-White backgrounds. This figure rose to 42% when only direct maternal deaths were considered. For women of both Black Caribbean and Black African backgrounds the maternal mortality rate was significantly higher compared to White women. Poor attendance or non-attendance for antenatal care was more frequently reported in cases of maternal death in women from both Black Caribbean and Pakistani backgrounds compared to cases affecting White women. Two thirds of maternal deaths to Black African women concerned women who were either recent immigrants, or refugees or asylum seekers, and one in ten of all deaths due to maternal causes involved women who spoke little or no English [19].

Perinatal mortality is also higher among women of non-White ethnicity. The most recent report on perinatal mortality concluded that compared to White mothers, Black mothers have just over twice the risk and Asian mothers 1.6 the risk of having a stillbirth, with similar increased risk for neonatal death (2.4 and 1.6 respectively) [20].

2.1 Policy context

Improving access to maternity services has been an important focus in recent years, supported by the 2007 Public Service Agreement (PSA) target which stated that all pregnant women should receive a "health and social care assessment" ('booking') by 12 weeks gestation[21] . The more recently published NICE guidelines on service provision for women with complex social problems recommends a booking appointment before 10 weeks[22].

Other policies emphasise the need for equal access to maternity care[23], whilst recognising that particular difficulties in accessing or maintaining contact with maternity services can only be addressed by services specifically designed to meet the needs of disadvantaged women. The importance of unequal access to maternity care is reflected by the fact that early access to antenatal

care was considered a key strategy in meeting targets to reduce inequalities in infant mortality in the UK[24]. And more recently, the White paper that preceded the recently enacted Health and Social Care Bill reiterated the commitment to eliminate discrimination and reduce inequalities in care and gave the newly formed NHS Commissioning Board an explicit duty to promote equality and tackle inequalities in access to healthcare[25].

However, a recent systematic review commissioned by the Department of Health to evaluate the effectiveness of interventions to increase the early initiation of antenatal care in socially disadvantaged and vulnerable women found insufficient evidence on which to base any recommendations[1].

2.2   Existing syntheses about uptake of antenatal care

Two existing published reviews synthesise qualitative literature on women's views of care in pregnancy. The first of these is the NICE commissioned guidelines 'Pregnant women with complex social factors'[22]. The guideline was not available at the time this study was initiated although a consultation draft was published during the initial stages of the study and the final version was published in September 2011. This document focuses on four 'exemplar' populations: women who misuse substances; women who are recent migrants, asylum seekers or refugees, or who have difficulties reading or writing English; women aged under 20 years; and women who experience domestic abuse. For each of these populations a comprehensive literature review was undertaken with the aim of identifying how to improve access to antenatal care for the four exemplar populations. For the purposes of the review, access was defined in terms of gestation at booking and uptake of additional antenatal services including antenatal education. The evidence review included (but was not limited to) qualitative studies looking at barriers to access. The number of qualitative studies was small in proportion to the overall number of included studies, and no attempt was made to synthesise the findings of the views' studies separately. In addition, the included views studies were not restricted to UK studies so the applicability of findings to women in the UK is unknown.

Lavender and colleagues carried out a systematic review of access to antenatal care in developed countries[26]. This review included both quantitative and qualitative studies, although a version of this review has been published which considers only the qualitative literature[27]. As with the previously mentioned review, the authors' decision to include non-UK studies (despite a focus on 'UK-like' countries) limits the immediate applicability of its findings to the UK. With inclusion limited to peer-reviewed journals, only one UK qualitative study was eligible.

The limitations of existing reviews confirm the need for a comprehensive synthesis of all publicly available literature considering the views of UK women from socially disadvantaged and vulnerable groups on care in pregnancy.

3 Aims and objectives of the review

3.1 Aim

To identify and describe the barriers to and facilitators of early initiation of antenatal care in socially disadvantaged and vulnerable women in the UK and to explore the extent to which interventions identified in a related effectiveness review address these.

3.2 Objectives

- To provide a systematic, descriptive overview of the research literature relating to the views of vulnerable and disadvantaged UK women about their feelings and experiences about antenatal care.
- To identify barriers and facilitators of early initiation of antenatal care in disadvantaged and vulnerable women in the UK or a defined subset of disadvantaged and vulnerable women.
- To assess the extent to which interventions identified in a recent systematic review of the effectiveness of interventions to increase the early initiation of antenatal care match (or 'address') the identified barriers and facilitators in UK women.

Although the study aims and objectives were framed in terms of disadvantaged and vulnerable UK women in general, because of the large volume of studies identified in the initial scoping review, a decision was taken, endorsed by members of the Advisory Group, to restrict the detailed review to Black and Minority Ethnic (BME) women and related groups in the UK such as recent immigrants, refugees and asylum seekers. These groups were selected as the focus of the main review as the scoping review indicated that there was a substantial body of relevant views' studies and these groups are consistently highlighted in national reports of maternal and perinatal mortality[20].

4 Methods

4.1 Study design

The study was a mixed methods review involving the following stages:

1. An initial scoping review to systematically identify and provide a descriptive overview of the available research literature relating to disadvantaged and vulnerable UK women's views about antenatal care;
2. An in-depth thematic analysis of a sub-set of the views studies with the aim of identifying barriers and facilitators of early initiation of antenatal care in a group of disadvantaged and vulnerable women in the UK defined based on the outcome of the scoping review (stage 1)
3. A cross-study synthesis integrating the findings of the views review (stage 2) with descriptive information about a sample of interventions with the aim of identifying interventions or approaches that appeared to match the barriers experienced by BME women in the UK.

4.2   Scope and definitions

4.2.1   Antenatal care
Antenatal care refers to pregnancy-related services provided between conception and the onset of labour encompassing monitoring of the health status of the woman and the fetus, provision of medical and psychosocial interventions and support, and health promotion[28]. Such services are typically provided as a package of care, often provided in an antenatal clinic, which we term 'comprehensive antenatal care'. In this review we focus on the timing of initiation of 'comprehensive antenatal care', which would normally start with a 'booking visit'. A woman would usually be referred for antenatal care by her GP but can be referred by other health professionals or social agencies as well as being able to self-refer.

4.2.2   Socially disadvantaged and vulnerable groups
Our definition of socially disadvantaged and vulnerable groups is based on the conceptual framework underpinning the PROGRESS and PROGRESS-Plus classification[29]. The mnemonic PROGRESS (Place of residence, Race /ethnicity, Occupation, Gender, Religion, Education, Socio-economic status and Social capital)[30] provides a framework for classifying aspects of social disadvantage with respect to the broader social determinants of health. PROGRESS-Plus[29] further expands this with the addition of other characteristics or circumstances likely to infer disadvantage within the context of a specific study.

4.3   Methods: initial scoping review
The purpose of the initial scoping review was to systematically identify and describe relevant research on women's views about antenatal care. The focus was on the views of women who live in the UK and are vulnerable or disadvantaged due to any of a wide range of factors including their age, ethnicity, and socio-economic status.

4.3.1   Inclusion criteria
We anticipated that data about women's views might be available from a wide range of different studies including both qualitative and quantitative designs. Data about views may be collected through observation, interactive interviews, focus groups or questionnaires using both open-ended and closed questions. We restricted inclusion to those studies that made use of qualitative methods because these allow women to express their views more freely than structured questionnaires.

Inclusion criteria were as follows:

4.3.1.1   *Population*
We required that the study reported views of women in socially disadvantaged or vulnerable populations living in the UK as described above. If studies were conducted using more general populations of women, they were included where the views of women from any of these specific socially disadvantaged or vulnerable populations were reported and easily identified.

The following disadvantaged and vulnerable groups were eligible for inclusion:

Socially disadvantaged due with respect to the social determinants of health[i]
- **P**lace of residence: women in prison, Travellers, homeless women, women living in deprived areas
- **R**ace/ethnicity: disadvantaged minority ethnic/racial groups
- **O**ccupation: sex workers
- **S**ocial capital: asylum seekers and refugees, recently arrived migrants (i.e. as defined by authors, or who have arrived within previous 12 months), other immigrant groups
- **S**ocioeconomic status: low socioeconomic status (women reported to be economically deprived, living in an area of deprivation, or to have low educational attainment).

Vulnerable due to:
- Mental illness/mental health problems
- Learning disabilities
- Experiences of abuse

For consistency with the earlier systematic review of effectiveness to be used in the cross-study synthesis, we also included women with the following specific risk factors for adverse birth outcomes that are strongly associated with social disadvantage:
- Teenagers
- Women who are HIV positive
- 'Substance misusers'

4.3.1.2 Study focus
We included studies which specifically addressed any of the following questions:

- What are disadvantaged women's views, understandings and experiences of antenatal care?
- What do women say influences their decisions to attend or not attend antenatal care?
- What are women's views about changes that may help them attend antenatal care?

We additionally included any report which potentially provided data about barriers and facilitators of uptake of care. This covered reports where the aim of the study explicitly related to initiation of antenatal care, but also those studies which contained women's views about antenatal care framed around other issues (for example around possible influences or related experiences, such as becoming a mother, domestic violence, peer and family relationships).

We included only studies that privileged women's views, in other words, they presented views directly as data that are valuable and interesting in themselves. We excluded studies which collected views data solely in order to generate variables that were then tested in a predictive or causal model.

4.3.1.3 Types of publication
We included a wide range of items reporting primary research: journal articles, books, reports, grey literature, and PhD theses. We excluded dissertations submitted for masters or undergraduate level qualifications.

---

[i] Based on the PROGRESS and PROGRESS-Plus framework – see section 4.2.2 above.

4.3.1.4 Publication date

Only studies published from 1990 onwards were eligible for inclusion. This date was chosen to match that of the effectiveness review by Oakley and colleagues[1].

4.3.1.5 Geographical area

The review's focus on studies from the UK aims to maximize the utility of the review for the development of UK policy.

4.3.1.6 Language

We included only articles and reports published in English.

4.3.2 Methods for identification of studies

A wide range of techniques was used to identify reports to reflect that views studies are frequently not indexed on commercially available databases and it may not be easy to identify that a study contains data about women's views on antenatal care by reading study summaries.

Search methods included sensitive searches of the bibliographic databases listed below, searches of online resources libraries, contact with key experts, screening of previous EPPI-Centre reviews and other relevant reviews, and citation and reference tracking of included studies.

4.3.2.1 Electronic bibliographic databases

The following electronic databases were searched in order to identify relevant reports:

- Medline (PUBMED)
- Embase (OvidSP)
- Cinahl (EBSCO)
- PsycINFO (OvidSP)
- IBSS (International Bibliography of the Social Sciences)
- Social Services Abstracts
- Social Care Online
- ASSIA
- British Index to Theses
- HMIC (Health Management Information Consortium) (OvidSP)
- BNI (British Nursing Index) (OvidSP)
- MIDIRS
- ZETOC
- OPENSIGLE

Sets of database search terms were developed to cover the concepts of: (i) disadvantaged women; (ii) antenatal care, and (iii) views. Where appropriate, an additional set of terms was used to restrict the search to studies conducted in the UK. A search strategy (detailed in Appendix 1) was initially developed for MEDLINE (PUBMED) using a combination of controlled vocabulary and free-text terms (the latter restricted to the title or abstract fields) in order to retrieve a high volume of references. This search strategy was then translated for use with the other databases.

Searches were carried out between April and May 2010. Retrieval finished at the end of July 2010. Search results were downloaded to EPPI-Reviewer (Thomas and Brunton 2007).

On-line searches targeted resources relating to health, maternity, and disadvantaged populations; and the World Wide Web was searched more widely using Google and Google scholar.

Two other pieces of work were inspected for citations: the NICE guideline for pregnancy and complex social factors [22]; and the systematic review of interventions to increase the early initiation of antenatal care in socially disadvantaged and vulnerable groups of women[1].

Following the full text screening stage, the reference lists of all included studies were checked and full text versions of any potentially relevant reports were retrieved and screened. We used Google Scholar to recover relevant references that cited any items already screened as eligible for inclusion.

An initial sample of titles and abstracts was double screened to ensure consistency between reviewers. The remainder were screened independently by one reviewer using the exclusion criteria listed in Table 1. Items were included for full-text review if either of the reviewers considered the study potentially eligible on the basis of the title and/or abstract.

Table 1: Exclusion criteria

	Stage 1: Abstract/title screening	**Stage 2: Full-text screening**
		Stage 1 criteria PLUS:
General	• Not English language • Not eligible publication type *Not study report (e.g. news item, case study) OR undergraduate or Masters level dissertation* • Published before 1990	
Population	• Not UK women • Women not disadvantaged or vulnerable*	
Study focus	• Not about uptake or experiences of maternity care	• Views not relevant to review topic# *Reported views neither relate to initiation of antenatal care nor have a bearing on why a woman might or might not initiate antenatal care early in pregnancy*
Study methods	• Not a views study *Study must report women's views about care during pregnancy* • Other ineligible method* *Study must use data collection methods which elicit women's views in their own words, using interviews, surveys, focus groups, participant observation etc. Exclude studies which only collect quantitative data.*	

*screeners instructed to use this exclusion criteria sparingly at the title/abstract stage

#this exclusion criteria only applied after item screened by two reviewers

4.3.2.2   Full text screening

The full text of all items included at the title/abstract stage were retrieved and screened by a single reviewer using the criteria listed in Table 1. Where a reviewer was unsure about their decision, a second reviewer screened the item and a decision was reached following discussion.

4.3.2.3   Classification of studies

Studies that matched the scope of the review and were eligible for inclusion on full text review were described using a standardised coding tool developed for the purpose of this review. This tool was used to describe the study focus, the study population and sample (e.g. socio-economic status, ethnicity), study type and method (e.g. questionnaire-based survey, individual interviews, focus groups). A copy of this coding tool is included in Appendix 3.

For an initial sample of studies, reviewers coded studies independently and then compared their decisions in order to reach consensus. For the remaining studies, coding was conducted by individual reviewers.

4.4   Methods: in-depth review and synthesis of women's views studies

Following the mapping exercise, the second stage of the views studies synthesis was to appraise and synthesise the identified research, with the intention of developing a model of barriers and facilitators relating to the initiation of antenatal care.

4.4.1   Inclusion criteria

For the reasons noted in section 3.2 above, the in-depth review focused on a subset of studies identified in the scoping review, specifically women in the following groups:

- Black and Minority Ethnic (BME) women
- Recent immigrants , defined as women who arrived in the UK within the last 2 years and/or women described as 'recent immigrants'
- Refugees and asylum seekers
- Women who did not have English as their first language

4.4.2   Appraising study quality

Each of the 36 included studies was further reviewed for its reliability of findings and its relative importance to the review using the EPPI -Centre study quality assessment tool. The tool used for assessing study quality (see Rees et al, 2009[31]) was developed by Harden[32] and built upon work conducted in the EPPI-Centre reviews listed earlier. Each study was assessed according to whether:

- The authors had taken steps to ensure rigour in the sampling, for example, by trying to reach as diverse a population as possible
- The authors took steps to ensure the data collected was comprehensive as possible
- The findings were grounded in/ supported by the data and
- The study privileges the views of the women.

Reviewers were asked to consider whether the methods of the study were adequate to the extent that any flaws would not influence the overall findings/conclusions of the study ("reliability").

Reviewers were then asked to consider the usefulness of the study to the review; how relevant the study was to the specific review question ("usefulness").

This information was used to give a final assessment of:

- Overall reliability (low/moderate/high)
- Usefulness of findings (not useful/moderately useful/very useful)

The key elements of this tool were considered to be represented in the final two sections, which cover an assessment of the reliability of the study and an overall judgment regarding the usefulness of the study to the review. A copy of the quality assessment tool is contained in Appendix 4.

Only those studies which met the minimum criteria of 'moderately' reliable and 'moderately' useful were included in the in-depth review. For those studies where the original two reviewers initially disagreed on the assessment of reliability and/or usefulness, and where this disagreement potentially affected inclusion or exclusion, a third reviewer independently assessed study quality to confirm the decision.

4.4.3   Synthesising views studies

Themes were identified from women's views reported in those studies considered at least moderately reliable and moderately useful, using methods developed in previous reviews[33]. Two reviewers a) read and re-read study findings; b) applied codes to capture the content of data; and c) grouped and organised codes into higher order themes. This process involved two rounds of coding. The first round of coding was conducted by two reviewers working alongside each other. During this process, codes were created inductively as needed, and reviewers went through the findings section of each report and assigned codes line-by-line. Once this had been done for all studies, the text assigned to all codes was checked and the codes reorganized into a diagram of themes and sub-themes. This diagram was presented to the Advisory Group for discussion. The studies were then re-visited by an individual reviewer to check the codes assigned, and to look for any text that had been overlooked during the initial coding. The EPPI Centre's specialist thematic synthesis software EPPI Reviewer 4[34] was used to manage the data. These themes then provided a framework for presenting barriers to initiating antenatal care. As women in these studies rarely spoke explicitly of barriers and facilitators to take up of antenatal care, barriers and facilitators were inferred from the quotes of the women in reports generated for each theme that was identified from the texts. These barriers and facilitators were in turn discussed by the team, revised and amended until a coherent set of barriers and facilitators had been identified. Of particular interest to this review were barriers and facilitators relating to the initiation of antenatal care and those that were influential prior to booking. Also included were barriers that could readily be inferred from evidence relating to structural or material circumstances even if only mentioned by women later in pregnancy. Evidence relating to antenatal classes was excluded. Evidence presented as study authors' interpretations alone was distinguished from evidence presented with the support of direct quotes from women.

4.5 Methods: cross-study synthesis: comparing intervention synthesis with views synthesis

The purpose of the cross-study synthesis was to assess whether the interventions identified in an earlier systematic review appeared to address the barriers and facilitators to early initiation of antenatal care identified in the views synthesis; and hence to identify interventions and/or approaches that might be used in the UK to increase the early initiation of antenatal care by BME women in the UK.

We based our approach on methods developed by Oliver and colleagues[35][i]. Because many of the included interventions were complex, multi-component interventions where the overall aim was much broader than the focus of this review (i.e. the interventions did not simply aim to increase the early initiation of antenatal care), we adapted the approach as described below (steps 2-3) to allow the reviewers to consider 'relevant elements' of each intervention rather than the intervention as a whole.

The cross-study synthesis was carried out as follows:

> **Step 1. Information gathering** Because the interventions were typically not described in detail in the evaluation study reports included in the review of effectiveness, we first attempted to obtain additional, more detailed information about the interventions by contacting the study authors (where possible) and searching for reports, websites and other online information about the interventions via Google.

> **Step 2. Description of the relevant elements of the intervention** Using all available information, the two reviewers (both of whom were familiar with the findings of the views synthesis) jointly prepared a narrative description of each the included interventions, focussing in particular on the aspects of the intervention which might have a bearing on initiation of antenatal care.

> **Step 3. Identification of elements of the intervention that addressed relevant barriers and facilitators** The two reviewers each independently prepared a structured narrative commentary on the ways in which the interventions addressed the barriers identified in the views synthesis; a final narrative commentary was then prepared jointly by the two reviewers.

> **Step 4. Summary of relevant intervention elements** Based on the information extracted at step 3, the two reviewers independently created and then jointly agreed a summary list of the approaches used in this group of interventions to address the barriers and facilitators identified in the views synthesis. A similar approach (independent review followed by discussion and agreement) was then used to prepare a final synthesis matrix summarising

---

[i] For an example of this approach see Rees, et al., 2006, 'Young people and physical activity: a systematic review matching their views to effective interventions' 36. Rees R, Kavanagh J, Harden A, Brunton G, Oliver S, Oakley A. Young people and physical activity: a systematic review matching their views to effective interventions. *Health Education Research* 2006;21:806-25..

the ways (if any) in which each of the included interventions addressed the barriers to early initiation of antenatal care experienced by BME women in the UK.

5   Results

5.1   Results: scoping the literature

In total, 12484 citations were identified via the various search sources, of which 3270 were duplicates. All unique citations (n=9214) were screened on title/abstract (stage 1), of which 8853 were subsequently excluded. Three hundred and sixty one items were screened on full text (stage 2), of which 289 were excluded. This left 72 items eligible for inclusion in the initial scoping review (Figure 1). Information about reasons for exclusion at stage 1 and 2 are presented in appendix 5.

Figure 1. Screening flow chart
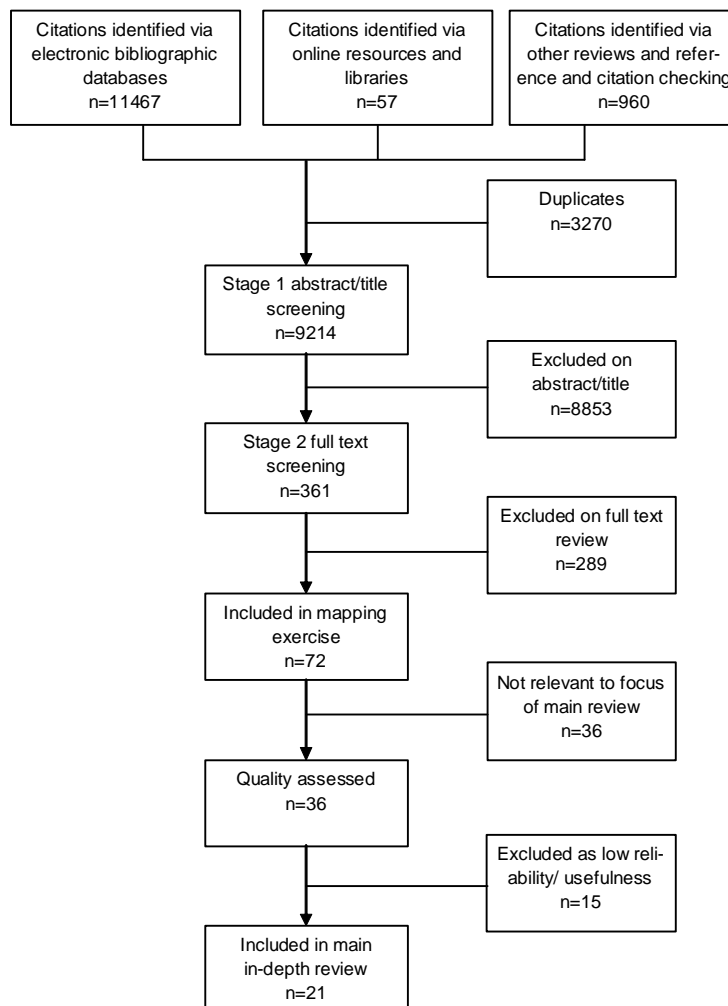
5.1.1 Characteristics of disadvantage of the study population

The characteristics of the women in the 72 views studies included in the scoping review are shown in Table 2.

Table 2. Characteristics of disadvantage addressed by the identified views studies

Attribute	Number of studies*
Women with experience of female genital mutilation	2
Women without English as first language	21
Women with experience of domestic violence	4
Women from Black and Minority Ethnic groups	32
Women from lower socio-economic groups	6
Recent immigrants, refugees or asylum seekers	11
Women with experience of substance misuse	10
Young/teenage women	18
Other (including women with disabilities, women with mental health problems, homeless women)	11

* Numbers add up to more than the total number of studies (n=72) as some studies cover more than one group

5.1.2 Selection of focus of main review

Seventy-two studies were included in the mapping exercise. After discussion and consultation with members of the study advisory group, it was felt that it would be prohibitive to include such a large and diverse number of items in the in-depth review. The decision was therefore taken to focus on studies eliciting views from women from Black and Minority ethnic (BME) backgrounds and related groups (recent immigrants, refugees or asylum seekers; women without English as a first language). In all, there were 36 primary reports of studies focusing on these groups.

5.2 Results: in-depth review and synthesis of women's views studies

5.2.1 Methodological quality of studies

The study quality tool was applied independently by two reviewers to all eligible studies (n=36). A third reviewer was needed to discuss and agree the final quality assessment in none of these cases. Overall, 21 of the 36 assessed studies met the minimum quality criteria of "moderate reliability" and "moderately useful".
Table 3 describes the quality of all studies assessed.

Table 3: Views studies - results of quality assessment

		Usefulness		
		High	Moderate	Low
Reliability	High			
	Moderate	V5 Dartnall (2005)[37]	*V1 Ali, (2004)[38]* *V2 Bawadi, (2009)[39]* V3 Briscoe, L(2009)[40] V4 Chan (2000)[41] V6 Davies (2001)*[42] *V7 Gaudion (2008a) [43]* *V8 Gaudion (2007) [44]* *V9 Gaudion (2006)*[45]* V10 Harper-Bulman (2002)[46] V11 Hennings (1995)[47] V12 Jayaweera (2005)[48] *V13 Katbamna (1993)*[49]* V14 McCourt (2000)[50] *V15 McLeish (2002)*[51]* V16 Nabb (2006)[52] V17 Puthussery (2010)*[53] V18 Raine (2010)[54] *V19 Richens (2003) [55]* V20 Straus (2009)[56] *V21 Waugh (2010) [57]*	Higginbottom (2006)[58] Jessa (1999)[59]
	Low		Akuffo (2007)[60] Baxter (1993)[61] Dosnajh (1997)[62] Miller (1995)[63] Oxford City Council (1990)[64] Pershad (1995)[65] Woollett (1995[66] Woollett (1990)[67]	Bowes (1993)[68] Davies, (2006)[69] Gaudion (2008b)[70] Ipsos MORI (2008)[71] Narang (1994)[72]

V1-V21 = numbering of views studies reviewed in-depth

* See Appendix 6 for details of linked report(s)

The studies that were at least moderately reliable and at least moderately useful and included in the in-depth review are referred to by their study number listed below. Ten of the 21 studies were 'grey literature', not published in peer-reviewed journals. They are indicated throughout the text by **_bold italics_**.

5.2.2   Description of included studies

Table 4: Populations included in each views study describes the populations included in each study, and further details are in Appendix 6. The 21 studies included in the in-depth review involved over 845 women, ranging from studies with only four participants (V3,V11) to over 380 (**_V9_**) with an average sample size of 40.

Table 4: Populations included in each views study

Study ID	First author (year)	Study population
V1	*Ali (2004)*	**Ethnicity:** Iraqi, Pakistani, Bangladeshi, Indian, African, European, Somali **Born:** Mixed (UK/non-UK) **English language ability:** Mixed **Asylum seekers/refugees:** No **Religion:** Muslim **Age range:** Not stated **SES:** Not stated **Other notable characteristics:** none stated
V2	*Bawadi (2009)*	**Ethnicity:** "Arab" (migrants from Jordan, Saudi Arabia, Syria, Algeria, Sudan and Egypt) **Born:** Outside UK, living in UK <10 years **English language ability:** Mixed **Asylum seekers/refugees:** No **Religion:** Muslim **Age range:** Not stated **SES:** implicit – medium to high SES **Other notable characteristics:** none stated
V3	Briscoe (2009)	**Ethnicity:** Afghani, Congolese, Rwandan, Somali. **Born:** Outside UK **English language ability:** English not first language. **Asylum seekers/refugees:** Yes **Religion:** Not stated **Age range:** 19-36 **SES:** Not stated **Other notable characteristics:** At least one women had suffered sexual violence in her country of origin
V4	Chan (2000)	**Ethnicity:** Chinese. **Born:** Mixed (majority not born in the UK) **English language ability:** Mixed (vast majority did not have English as first language). **Asylum seekers/refugees:** No **Religion:** Not stated **Age range:** 20-45 **SES:** Mostly lower socio-economic class **Other notable characteristics:** None stated
V5	*Dartnall (2005)*	**Ethnicity:** Pakistani, Bangladeshi, Somali, Romany. **Born:** [assumed] mixed. **English language ability:** [assumed] mixed. **Asylum seekers/refugees:** Mixed **Religion:** Some Muslim, some not stated. **Age range:** Not stated, some teenage **SES:** Mostly lower socio-economic class. **Other notable characteristics:** 26 were users of services; 12 were defined as "minimal users". Five women were teenage parents, four women were substance misusers (1 alcohol, 3 drug), 10 women had learning difficulties, and four women were homeless.
V6	Davies (2001)	**Ethnicity:** Somali. **Born:** Not stated, but the majority of participants had lived in the UK <10 years. **English language ability:** All data collection conducted in Somali. **Asylum seekers/refugees:** No. **Religion:** Not stated. **Age range:** 21-40. **SES:** Author states information not collected. **Other notable characteristics:** None stated
V7	*Gaudion (2008a)*	**Ethnicity:** Afghani, Chinese, Eritrean, Iraqi, Sri-Lankan, Somali, Ugandan. **Born:** Mixed. **English language ability**: Not stated **Asylum seekers/ refugees**: Yes, majority. **Religion:** Not stated. **Age range:** Not stated. **SES:** Not stated. **Other notable characteristics:** None stated
V8	*Gaudion (2007)*	**Ethnicity**: Women from the following communities: Black African (Ugandan, Ivory Coast, Nigeria, Democratic Republic of Congo, Sudan); Moroccan, Eritrea, Pakistani, Bengali, Yemen, Irish Travellers, Albanian, Somali, Chinese and Vietnamese. **Born:** Assume mixed (but not explicitly stated). **English language ability**: Mixed, sample included those with little or no English. **Asylum seekers/ refugees**: Some. **Religion:** Not stated. **Age range**: Not stated. **SES:** Not stated

Study ID	First author (year)	Study population
		Other notable characteristics: Sample included women who were asylum seekers, refugees, homeless families, those with little or no English and women with mental health problems and/or problematic addiction.
V9	*Gaudion (2006)*	**Ethnicity**: participants were from Afghanistan, Albania, Algeria, Argentina, Bangladesh, Bolivia, Burundi, Cameroon, Canada, Democratic Republic of Congo, China, Egypt, Ethiopia and Eritrea, India, Jamaica, Hungry, Iran, Iraq, Israel, Ireland (Travellers), Ivory Coast, Kenya, Malawi, Mongolia, Morocco, Nigeria, Pakistan, Peru, The Philippines Poland, Portugal, Rwanda, Russia, Sierra Leone, Tanzania, Uganda, Somalia, Spain, Sri Lanka, Sudan, Tanzania, Turkey, Venezuela, UK (Black British and White British) Vietnam, Wales, Yemen and Zimbabwe. **Born**: Mixed (UK/non-UK) **English language ability**: Mixed, some had no English. **Asylum seekers and refugees: M**ixed. **Religion**: Not stated. **Age range: N**ot stated. **SES**: Not stated. **Other notable characteristics**: Sample included those from 'hard to reach' groups including: asylum seekers and refugees, women with insecure immigration status, homeless people, women with mental health problems/and or problematic addiction, migrant workers, women recently discharged from prison.
V10	Harper-Bulman (2002)	**Ethnicity**: Somali. **Born**: Not stated. **English language ability**: Interpreter present for all interviews and focus groups. **Asylum seekers/ refugees**: Yes. **Religion**: Not stated. **Age range**: Not stated. **SES**: All living in local authority accommodation. **Other notable characteristics**: Some women had experienced FGM.
V11	Hennings (1995)	**Ethnicity**: Bangladeshi. **Born**: Born outside of the UK. **English language ability**: Interviews were conducted in the women's own language. **Asylum seekers/ refugees**: No. **Religion**: Most assumed Muslim. **Age range**: 24-40 (latter age estimated). **SES**: Not stated. **Other notable characteristics**: None stated.
V12	Jayaweera (2005)	**Ethnicity**: Bangladeshi **Born**: Majority born outside UK. **English language ability**: Assumed all had English as a second language **Asylum seekers/ refugees**: No. **Religion**: Not stated. **Age range**: 20–30 years. **SES**: Low educational attainment, high material disadvantage. **Other notable characteristics**: None stated.
V13	*Katbamna (1993)*	**Ethnicity**: Gujarati (Indian/East African) and Bangladeshi. **Born**: Most outside UK (1 UK born, 13 in Bangladesh, 4 in India, 13 in East Africa). **English language ability**: Not stated, although low levels of literacy were reported. **Asylum seekers/ refugees**: No. **Religion**: Hindu, Muslim. **Age range**: Early twenties and below with a few who were in the age range thirty-five and over. **SES**: Mixed. Bangladeshi women were predominantly from the lower end of the socioeconomic scale, Gujarati women were predominantly in social class I/II. **Other notable characteristics**: None stated.
V14	McCourt (2000)	**Ethnicity**: Black Caribbean, African, South and East Asian, and Mediterranean or Middle Eastern women; also refugees from Eastern European and African states. **Born**: Mixed UK/non-UK **English language ability**: Most fluent English. **Asylum seekers/ refugees**: Mixed. **Religion**: Not stated. **Age range**: Not stated. **SES**: Not stated. **Other notable characteristics**: None stated.
V15	*McLeish (2002)*	**Ethnicity**: women from Afghanistan, Angola, Bangladesh, Burundi, Czech Republic, Democratic Republic of Congo, Eritrea, Ghana, Iran, Iraq, Kosovo, Lithuania, Nigeria, Poland, Sierra Leone, Somalia, South Africa, Turkey, Uganda

Study ID	First author (year)	Study population
		Born: Born outside UK. **English language ability:** Mixed **Asylum seekers/ refugees:** Yes (24 asylum seekers and nine refugees). **Religion: Not stated** **Age range:** 16 to over 40. **SES:** Low SES. **Other notable characteristics:** Some participants were HIV positive.
V16	Nabb (2006)	**Ethnicity:** Women from Algeria, Congo, Angola, Nigeria, Somalia and Iraq. **Born:** Born outside UK. **English language ability:** English a second language **Asylum seekers/ refugees:** All asylum seekers. **Religion:** Not stated. **Age range: N**ot stated. **SES: N**ot stated. **Other notable characteristics: N**one stated.
V17	Puthussery (2010)	**Ethnicity:** Indian, Pakistani, Bangladeshi, Black Caribbean, Black African, Irish. **Born:** Born in the UK. **English language ability: N**ot stated. **Asylum seekers/ refugees**: None. **Religion:** Not stated. **Age range:** Under 20 to 40 and over. **SES:** Mixed **Other notable characteristics:** None stated.
V18	Raine (2010)	**Ethnicity:** Bengali, Somali. **Born:** Mixed. **English language ability:** Mixed **Asylum seekers/ refugees: N**ot stated. **Religion: N**ot stated. **Age range:** Average age 30.2 years. **SES:** Mixed. **Other notable characteristics: N**one reported.
V19	*Richens (2003)*	**Ethnicity:** Pakistani. **Born:** Mixed (UK/non-UK) **English language ability:** Mixed. **Asylum seekers/ refugees:** No. **Religion**: Some women were Muslim . **Age range:** Not stated. **SES:** Women from disadvantaged areas. **Other notable characteristics:** None stated.
V20	Straus (2009)	**Ethnicity:** Somali. **Born:** Born outside UK. **English language ability**: English a second language **Asylum seekers/ refugees**: Not stated. **Religion: N**ot stated. **Age range:** 23-57 years. **SES: N**ot stated. **Other notable characteristics**: It is implied that some of the interviewees had experienced FGM given that the author states that FGM is a widespread practice in Somalia - estimates of 95%.
V21	*Waugh (2010)*	**Ethnicity: N**ot stated. **Born:** Not stated. **English language ability:** English a second language **Asylum seekers/ refugees:** Yes, all. **Religion:** Not stated. **Age range:** Not stated. **SES: N**ot stated. **Other notable characteristics:** None stated.

Nearly all of the studies took place in cities in England and there was one study which included women in Scotland (*V1*). There were no studies conducted in Wales. Of the studies conducted in England around half included women living in London (*V7, V8*, **V9**, V10, *V13,* V14, *V15,* V17, V18, V20 and possibly V5) , and several included women living in Manchester (*V1,* V4, *V9, V15*) and Leeds (*V1*, V12, *V21*), but many other cities and regions were also represented (see Appendix 6). Some studies did not name their cities.

A substantial number of studies focused on or included the views of women who were asylum seekers or refugees (all or predominantly asylum seekers or refugees: V3, **V7**, V10, **V15**, V16, **V21**;

mixed including some asylum seekers and refugees: **V5, V8, V9,** V14), one study featured recent migrants: three asylum seekers in the UK for less than a year and one refugee in the UK less than three years (V3). The remainder of the studies did not report the citizenship status of their participants or featured ethnic minority women who were UK born (V17). Some studies reported women experiencing homelessness (**V5**, *V8, V9*).

The religion of participants was not stated in many studies; three studies focused on the views of participants who were Muslim (*V1, V2*, V11,) and three stated that some of the participants were Muslim (**V5, V13**, V19).

None of the studies reported on the occupations of the women taking part.

There was a broad ethnic mix of women across the studies and a range of citizenship status. Women who said they were from Somalia were most commonly mentioned (*V1*, V3, *V5*, V6, V7, V8, V9, V10, V14, V16, V18, V20), but women from many other African countries were also represented. Women of Bangladeshi descent were also included in a number of studies (V1, *V5*, V11, V12, *V13*, V15, V17). Ten studies focused on a specific group of women (Somali V6, V10, V20; Bangladeshi V11, V12; Chinese V4; Pakistani **V19**; "Arab" migrants **V2**; Bengali and Somali V18; Gujarati and Bangladeshi **V13**). Six studies reported a broad ethnic mix of participants (*V1, V8, V9, V14, V15, V17*). Women from Romany or other Traveller communities featured in three studies (*V5, V8, V9*).

Only two studies reported the educational attainment level of their participants (V12, V17). One reported that the majority of their participants had low levels of literacy and educational attainment (V12) and the other study sought participants with high, middle and low educational attainment measured in years in education with most of their participants reporting middle to low number of years in education (V17).

For those studies that reported the socio-economic status (SES) of their participants the majority reported their SES as low (V4, V5, V10, V12, *V15*, **V19**) and, although not stated, the various 'hard to reach' groups in another study also imply a low SES (V9). Two studies' participants were from high/medium and low SES (V13, V18) and one study's participants were from medium to high SES based on the occupations of their husbands (*V2*).

Seven studies explicitly included women born outside the UK (V2, V3, V11, V15, V16, V20, V21) and three reported that women included in the study were predominantly born outside the UK (V4, V6,V12, V13). Six studies 'mixed' groups of women (V1, V7, V9, V14, V18, V19) and five did not state whether or not the women had been born in the UK (V5, V8, V10,). Only one explicitly studied UK born women (V17).

English language ability was sometimes described in terms of 'fluency' and/or need for an interpreter, and sometimes in terms of whether English was the woman's first language. Only two studies explicitly included women who were mainly fluent (V14) or UK born and therefore assumed to be fluent (V17). Nine studies included women who did not speak English, were not fluent, or who had English as a second language (V3, V6, V10, V11, V12, V13, V16, V20, V21), and a further eight included women whose English language skills were mixed (V1, V2, V4, V8, V9, V15, V18, V19).

Some participants reported additional disadvantages such as being HIV positive (***V15***) or recently discharged from prison (V9), or having learning difficulties (V5), mental health or addiction problems (V8, V9), or experience of Female Genital Mutilation (FGM) (V10,V20) or sexual violence in their country of origin (V3).

Around half of the included studies sought women's views via one-to-one in-depth interviews (***V2***, V3, V4, V11, V12, ***V13***, V14, ***V15***, V16, V17, V20, ***V21***), six studies employed both in-depth interviews and focus group sessions or group work (***V5***, V6, ***V7, V9***, V10, V18) and three studies used only focus groups or group work (***V1, V8***, V19). Three studies employed additional methods of enquiry, such as inviting women to take photographs depicting aspects of their life to facilitate discussion (V3) and working together in a group to create illustrations for a storyboard that could be used in the future for helping women understand and use antenatal care (***V8, V9***). Nine studies (V6, V8, V10, V12, ***V15***, V16, V18, V20, V21) used the services of an interpreter to interview in the preferred language of the women taking part.

Researchers employed a range of methods and sites to recruit participants and the majority were either purposive or opportunistic in approach, mainly due to difficulties in gaining access to women who may be hard to reach, such as women who were asylum seekers and refugees as well as women from Traveller communities. Six studies approached community and religious projects and groups (***V2, V5, V7, V15, V19,*** V20)eight studies approached telephone help-lines or advocacy groups to identify and recruit participants (***V5***, V6, ***V8***, V9, V12, V16, V18, ***V21***) and eight studies attended clinics or gained information from clinical records to select participants (V3, V4, ***V13***, V14, V17, V18, V19, V21).

5.2.3 Barriers and facilitators to initiation of antenatal care

A thematic analysis of the findings from studies of women's views and experiences of pregnancy and antenatal care identified themes and sub-themes relating to:

- Experiences of care
- Personal and family issues
- Structural and material life circumstances
- Bridging minority cultures with mainstream services

When inferring barriers and facilitators to initiation of antenatal care, whilst the subthemes remained unchanged, the overarching themes were rearranged to merge mainstream services with services for minority cultures, and to distinguish barriers and facilitators relating to individual women's knowledge, culture, motivations and beliefs from those arising from their practical family and social circumstances. Barriers and facilitators are presented below under the following major themes:

- Structural and material life circumstances
- The health services and care pathway experienced by the women
- The knowledge, culture, motivations and beliefs of individual women
- Their social support and family circumstances

The studies' text within these themes was inspected for barriers and facilitators that were divided into barriers and facilitators:

- explicitly relating to initiating antenatal care
- relating health care experienced prior to the booking appointment
- inferred from women talking later in pregnancy

The thematic tree in figure 2 relates to initiating antenatal care, experiences prior to the booking appointment and women talking later in pregnancy. Table 5 lists only those barriers and facilitators related to initiating antenatal care and experiences prior to booking. We present below the detailed findings of the synthesis within the major themes, only including those barriers and facilitators explicitly related to initiation of antenatal care, or experienced before booking antenatal care. Each finding is annotated with the ID of the studies from which they were drawn. Studies relating wholly or predominantly to asylum seekers and refugee are identified with the superscript [AR]. Those studies marked with an asterisk* present the authors' findings without any direct quotes from the participants. Study IDs presented in **BOLD** indicate they are published informally (grey literature).

Additional barriers and facilitators inferred from women talking later in pregnancy related to:

- Continuity of care
- Choice, empowerment and decision making
- Insensitivity to cultural preferences/ differences
- Insensitivity to woman's lack of knowledge/ understanding

Their connection with initiation of care was usually tenuous. However, women talking about their poor experiences may be reluctant to initiate antenatal care in subsequent pregnancies, or may discourage friends or family from initiating their own antenatal care. Although these are not included in the synthesis because of their tenuous links with initiation of care, findings are presented in Appendix 8.

Figure 2: Thematic tree arranged to infer barriers and facilitators

Table 5: Overview of barriers and facilitators to initiation of antenatal care

Structural and material life circumstances	The care pathway for pregnant women	Individual knowledge, culture, motivations and beliefs	Family and social
No fixed address prevents registration for care • Dispersal policies disrupt care & social support Lack of or inaccessible local services Lack of joined-up services Lack of material resources to navigate services Difficulties in navigating services Information has to be sought out, not offered: • Access dependent on prior knowledge of entitlements and services available • Disadvantaged women not directed to services created for them • HP lack of knowledge of services System that is indifferent or impersonal • Lack of emotional support System that is insensitive • Lack of recognition of women as individuals with complex needs • Women experience loss of control Language barriers • Lack of timely, appropriate professional interpreters	Women's lack of knowledge regarding their right to care Women's lack of knowledge regarding purpose of care, and choices available Professionals' lack of knowledge regarding rights to care Professionals' failure to direct women to appropriate services • GPs are the first and only contact with healthcare system Poor relationships between women and professionals • Confidence and trust in health professionals (FACILITATOR)	Values and beliefs • Cultural preferences for female healthcare staff; • Religious acknowledgement of the need to use male health care staff in exceptional circumstances • Belief in value of initial GP consultation (FACILITATOR) • Views of pregnancy as natural and not requiring medical intervention • Medical intervention is not necessary, course is decided by fate • Concern that medical intervention may be harmful • Anxiety about being pregnant/non-acceptance of pregnancy	Cultural Barriers • Experience of different structures of healthcare in country of origin • Pregnancy viewed as a private experience • Lack of informal social networks that could offer advice and support Language barriers • Reliance on family members, including children, and other informal interpreters to translate literature

5.2.3.1 Structural and material life circumstances

No fixed address and dispersal policies
Women described difficulties arising from having no fixed address either because they had a transient lifestyle (*V5, V7* [AR]*, V9*, V21* [AR]*) or because, as asylum seekers, they were subjected to dispersal policies (*V5*, *V8*,* V16 [AR], *V21* [AR]*). Some women found that, with no fixed address, they could not register with a GP; a home address was an administrative precondition for registration. Another problem was care being deferred because women were likely to be moved to a different area in the near future. These barriers to initiation of antenatal care were particularly evident for asylum seekers and women from Traveller communities.

> *"It's very difficult to find a GP because they see that you're moving from place to place so they don't want to give you a place [at a GP's surgery] cos they think you're just going to be there for a short time."* (*V5* Asylum seeker)

Many of the women in a study of asylum seekers talked about the policy of dispersing asylum seekers around the country severing social ties and potential support networks, and how this might present a barrier to booking for antenatal appointments (*V21* [AR]*). Hostel and emergency accommodation was not conducive to accessing antenatal care.

> *On many occasions, women talked about being moved away from areas where they had begun to build up support networks. Those living in hostels and emergency accommodation said they had frequently missed meals when they were attending antenatal appointments, and described uncaring housing staff that refused to make any concession to the fact of their pregnancy.* (*V21* [AR], referring to asylum seekers and refugees)

Lack of availability or access to local services
Many women expressed a preference for local services, although they were often not available, or not accessible. This was seen as a direct barrier to initiating antenatal care in some studies (*V5, V7* [AR]) and could be inferred from women's experiences later in pregnancy in others (V12, **V13**). Some women who had strong ties to their community also preferred to access information about managing pregnancy within their own community, drawing on experiential knowledge instead of seeing pregnancy as a health issue necessitating outside medical interference. Not having health services that were considered part of or compatible with the woman's community may pose a barrier to initiation of antenatal care services.

The lack of local services was mentioned in several of the included studies. Some women who sought GPs experienced difficulties finding them locally (*V7* [AR], *V15* [AR]) or their attempt to register for GP care was refused (*V5, V7* [AR]*, *V15* [AR]*). Lack of material resources posed a structural barrier to initiation of antenatal care. Refugees and asylum seekers also cited lack of money for travel out of the immediate area as a barrier to attending hospital appointments that were not local.

Many women faced physical difficulties attending antenatal hospital appointments. In particular, those who were destitute or receiving Section 4 support had no way of paying for bus fares and had to walk to hospital. Two women who lived close to St James hospital said this was not a problem, but others had to walk to appointments, sometimes several miles. (**V21** Asylum seekers)

The lack of local services also influenced the wider experiences of social support and family circumstances, and to the personal or psychological sphere of knowledge, culture, motivations and beliefs (see below).

In very practical terms, women who were new to this country often found negotiating public transport systems and travelling alone with limited English particularly onerous and so experienced the lack of locally-based services as a barrier to initiating antenatal care that may be located further afield (**V7** [AR]*, **V9, V21** [AR]*). A fourth study provided additional evidence that was not explicitly linked to pre-booking experiences (V12)

> *"I find it quite difficult ... I just walk short distances and to go to the hospital or town, I get a bus or taxi. I can't speak English, so I find it quite difficult to communicate."* (V12 Woman from Bangladesh)

Lack of joined-up services
Problems arose from health services being fragmented, and from the interface between health services and transport or immigration services. Several studies mentioned the lack of joined up services raising barriers to initiation, where doubts were expressed about rights and entitlements to care (**V21** [AR]), and difficulties raised by transient lifestyles (**V9, V7** [AR], **V21** [AR]), dispersal of asylum seekers (**V5**) and procedures for GP registration (**V5, V21** [AR]*). Lack of joined-up services were also raised by women talking about their experiences of care and advocacy services (**V5)** although this was not always explicitly linked to the pre-booking period **(V21** [AR]).

Channels of communication between different organisations were found to be fragmentary with health professionals themselves often appearing uncertain as to how women may be referred or followed-up (**V21** [AR]). This was particularly the case for women of no fixed address, such as women from the Traveller community or refugee and asylum seekers (**V7** [AR], **V9, V21** [AR]). Dispersal to other areas would start a new cycle of GP registration and referral (**V5**).

> *"They used to give me vouchers, and a one-day bus pass for the day when you have to go and get the vouchers; they put a date stamp on it. And if you miss that day, like you are sick from pregnancy, that's it. I had sometimes to exchange my £10 voucher for £3 with someone, just because I need transport. I asked social services to give me cash, they said no, you are single, you haven't given birth yet"* (**V15** [AR] asylum seeker).

Lack of material resources to navigate services

Women talking about the lack of material resources necessary to navigate services all came from studies that sought the views of refugees and asylum seekers (, ***V15*** [AR], ***V21*** [AR]). The lack of local services combined with the lack of cash for travel prevented women from accessing antenatal care.

> *Two women described considerable difficulties in accessing antenatal care because they had no money for transport. They were not aware of the scheme to reimburse women on low incomes for fares to hospital and in one case had no cash at all, so could not have benefited from reimbursement* [***V15,*** referring to asylum seekers]

Difficulties in navigating services

Advocacy services helped women initiate their antenatal care (***V5, V12, V21*** [AR]) and its absence presented a barrier (***V21*** [AR]). Advocacy was defined as those services provided by formal agencies working for the interests of certain groups of women and informal advocacy services provided by health care professionals. Advocacy was associated with locating services, and enabling joined-up working between different organisations, such as social services and housing services. A lack of advocacy could also be interpreted as health professionals being insensitive to the women's complex social situation and how this may impact or inhibit the woman's ability to access appropriate health care. Lack of advocacy could also be interpreted as health professionals not having the time available to seek out the knowledge required and/or to communicate with the woman in a way that might help navigation.

Advocacy that enabled women to access care required knowledgeable professionals to take responsibility for the women's rights and entitlements. The studies that included views about advocacy concerned views of refugees and asylum seekers, women from a Romany community and the experiences of Bangladeshi women.

> *"Yes, [I got help and advice] from [the neighbourhood project]. I wanted to know which would be the best person to go to for advice"* (V12 Bangladeshi woman).

Information about services has to be sought out, not offered

Women often reported that health care professionals were not forthcoming with all the information that they required to take up and continue their antenatal care. Instead women had to be proactive in asking for the information they require, which presupposes some prior knowledge or experience of the organisation or availability of health services. This theme appeared in many studies (***V1, V5, V7*** [AR], ***V8***, V14, ***V21*** [AR]), not always explicitly about the pre-booking period (V17, ***V19,)*** and related to all four domains of experiences of care: structural and material life circumstances; health services and care pathway; knowledge, culture, motivations and beliefs; and social support and family circumstances. The view that information had to be sought out was expressed by all groups of women, including Muslim women (***V1***), and refugees and asylum seekers (***V7*** [AR],V18 [AR]). This created barriers to care in that women were unaware of services that were available, including services designed to bridge the gap between disadvantaged women and mainstream services, such as professional interpreters, reimbursements or other help with travel to hospital appointments.

*While most [asylum seekers] acknowledged their pregnancy, their engagement [with health services] was likely to depend on whether other women informed them about it (or on information from asylum-seeker care workers and lawyers). Knowledge about the location of the services and how to reach them also helped women to access them. There was no typical time when asylum seekers accessed the maternity services as it very much depended on their location and referral from others. [**V5,** referring to asylum seekers]*

"Different places have different policies, I did not understand what I was supposed to do so I did not go." (**V8** Egyptian woman)

The conditions for limited communication were set up, however, by the experience of the initial GP visit, where most women said they received little information or choice about options for care, where to have their visits or give birth, and were not encouraged to ask for it. [V14, referring to minority ethnic women]

A young woman who discovered she was pregnant in hospital said she was given no information about accessing a midwife through her GP. She said she felt so upset at the way she was spoken to that she refused to believe she was pregnant and did nothing about it until her housing support worker made an appointment at the hospital.

"I didn't phone anyone because I didn't believe what that nurse told me... every month I was still having my period so I thought she was lying because she wanted to humiliate me in front of people – she said 'right you are pregnant – you little girls of today you don't know what you are doing.' I just started crying because the way she told me was like a smack in the face." (**V21**[AR] Refugee/ asylum seeker*)*

Women who were asylum seekers experienced additional difficulty in accessing care because they were less sure of their entitlement, and often believed they would be charged for services, which may have been their experience elsewhere.

An impersonal or indifferent system

Considering their experiences before booking, women in five studies (**V8, V9**, V14, V20, **V21**[AR]) felt that the British healthcare system was organised in such a way that it did not recognise or accommodate them as individuals with complex needs. The same barrier was also inferred from reflections later in pregnancy (V3[AR], V6, V12, V17).

Women whose first language was not English reported not being given time to express themselves fully, leaving them feeling rushed, forced into decisions and feeling that they were viewed as an inconvenience (V14, **V8**). Women described a system where they were not offered choices or not encouraged to ask questions or have control over the course of their care; an indifferent or impersonal system.

"People are not given a choice. It is all too rushed. There is no space to talk about what they want when English is not your first language it can take longer to express yourselves you need to be able to create space if you are articulate or things are just forced on you"
(**V8** Woman from Somalia)

Asylum seekers about to be dispersed were particularly anxious, having no power over where they were sent and not knowing anyone once they arrived (V3 [AR], *V15*[AR]). In one study an asylum seeker from Somalia reported that the sense of isolation experienced as a result of dispersal impacted on the mental health of women from her community (V20). Asylum seekers also encountered a system that was inflexible and did not recognise their additional needs as pregnant women. Fixed mealtimes in Bed and Breakfast accommodation were missed if they clashed with appointments (*V21*[AR]). Women were fearful that their needs and requirements as pregnant women would negatively influence their immigration status (*V8*).

An insensitive system

Many of the women in the studies reported that they found the system was insensitive and lacked recognition of their individual needs or particular situation. This theme was found in four studies (*V2, V8,* V14, V18) and included themes of insensitivity to women's perspectives, problems or their lack of knowledge (*V8*) and/ or understanding (*V2*, *V8*, V14). Insensitivity to women's lack of understanding continued to be a barrier later in pregnancy (*V5*, V6, *V15*[AR]).

Conversely, health professionals who took the time to be sensitive to women's perspectives, their problems and difficulties in understanding how the healthcare system worked could facilitate booking for antenatal care (*V2*,) and on-going care (*V5, V15*[AR], *V1*). The women in these studies were from a broad ethnic mix, including asylum seekers and refugees, and women from Traveller communities.

> "When they visited me the first time, they asked me if they had to take off their shoes. It seems they know about our praying. During each visit they assured me that I would be examined by a female. They are aware of these variations between two cultures." (**V2** Arab woman)

Language Barriers

Women talked about language barriers when accessing antenatal care. Although this evidence was not explicitly linked to initiating care or pre-booking, reviewers considered language barriers as relevant to initiating antenatal care.

Language barriers were related to the structures of the health service in terms of the availability of translated materials and interpreters, and to women's family and social relationships when these products and services were not available. Both are considered here.

Language barriers presented a barrier prior to booking in more than half of the studies (*V1, V2*, *V5,* V6, V7[AR], *V8*, *V9*, V10[AR], *V13*, *V15*[AR], V16 [AR], V17, *V19*, *V21*[AR]); those involved were from a broad ethnic mix of the studies' populations. The majority of the views related to communicating information via written leaflets and pamphlets, the use of formal and informal interpreters and the extent to which the information communicated in English was understood.

Two studies included women who talked about being given booklets and literature, but only in English (**V2,** V5). The lack of translated literature also left women reliant on family members for translations, who may not be available to help when required (**V2**).

> *"On her first visit she gave me many booklets, but all in English, nothing in Arabic, so I had to wait for my husband to be free to translate them for me" (***V2** Migrant Arab woman)*

Difficulties in communicating effectively with health professionals left women unable to understand and access the services available for them (V5). Women who talked about receiving literature often said that they would also like the time to discuss the information it contained but this was not always possible or encouraged by health professionals (**V1**, V17).

> *"They [health professionals] don't give you any time to sit and talk through anything, any symptoms ... I had to phone friends [to ask] 'Is this normal?'"* (**V1** Muslim woman)

Women in four studies talked about a lack of professional interpreters (**V9**, V16[AR], **V19, V21**[AR]) being made available to overcome language barriers. In some cases women felt pressurised into doing without an interpreter (**V9, V21**[AR])

> *"It would be much better if there had been an interpreter there to make me understand. But all the times they say your English is good – they say you have to help yourself, you don't need an interpreter...you can manage."* (**V21** [AR] Asylum seeker)

Sometimes the delay in accessing a professional interpreter meant the appointment was lost (**V19**, V16[AR]).

> *"...I was in the surgery and there was a family there from Libya and the lady was pregnant, she didn't understand English and she was waiting for an interpreter to come, but the interpreter was a bit late so the woman lost her appointment at the surgery*." (**V19** Bengali woman)

Women often reported having to rely on members of the family, often children, to interpret for them (V10 [AR], V16 [AR]*). Although women in these studies expressed the view that under normal circumstances discussing certain issues in front of children was inappropriate, the alternative was to delay or miss one's appointment. An additional impact of using children as interpreters was that they were sometimes taken out of school to attend appointments (V10 [AR]). These two studies focussed on the views of asylum seekers and Somali refugees.

5.2.3.2   The care pathway for pregnant women

Women's lack of knowledge regarding their right to care

Barriers to the initiation of antenatal care by asylum seekers were experienced at all stages of pregnancy, and included being unaware of any entitlement to free care (**V5***, **V8, V21** [AR]*), and particularly registration for GP services (**V15** [AR]). Some women were too afraid to ask for care or were under the impression that a request for health care might negatively affect the women's claim

for asylum. Their feelings of powerlessness and fear for their legal status emerged from a number of studies that sought the views of women who were refugees or asylum seekers; specifically, there were concerns about confidentiality and fear of betrayal of trust (***V5****, ***V8***). It was commonly reported that women who were already in contact with different formal organisations as a consequence of their legal status were not directed to the health services to which they were entitled. On the other hand, the perception that the NHS would treat everyone equally was found to be a facilitator to initiation of antenatal care (***V2***).

> *"I mean where people come from there is no NHS it is just pay, pay, pay...they do not know about free antenatal care but they are frightened at the same time about people asking too many questions and if it not their first baby why do you need to go?"*
> (***V8*** Woman from Rwanda)

Women's lack of knowledge regarding available services, purpose of care, and choices available [i]

Eight of the studies included women who talked about their lack of understanding of services as influencing their first booking. (***V5***, V6, ***V7***[AR], ***V8, V9***, V10, V18, ***V21***[AR])

British women often talked about their lack of understanding being due to the perceived complexity of the system combined with health professionals not explaining what services were available and how to access them. Having limited English compounded this further.

Asylum seekers and refugees lacked an understanding due to having no prior experience of the British health care system. This included a lack of understanding of the independence of the NHS from other government agencies. Women who were asylum seekers reported feeling fearful that information shared with healthcare professionals might lead to their deportation or impact some other way on their claim for asylum. Women reported that they were worried that they might be charged for care, as would be the case in their country of origin (***V8, V21***[AR]) or were not legally entitled to use maternity services or had reduced rights compared to women with full citizenship. As a result, women seeking asylum felt unable to make requests or to complain about receiving poor services (***V8, V5***).

> *"I expected not to be able to see them [GP/midwife] because of my immigration status-I was frightened that I was doing something that was not legal. I was worried that I may be deported."* (***V5*** Asylum seeker)

There was a lack of understanding of the purpose of the ongoing antenatal care, particularly amongst women who have had children before. Routine ultrasound scans were a source of anxiety (V8) and some doubted its safety (***V8***, V18).

---

[i] For a useful description of antenatal care in middle and low income counties, see the country profiles in the UNFPA report The State of the World's Midwifery 2011, available at http://www.unfpa.org/sowmy/report/home.html

Although there was no evidence that it influenced initiation of care, women from the Romany, Somali, Asian Muslim and Arabic Muslim communities and women who were refugees or asylum seekers found it difficult to discuss health issues and/or to be examined by male health professionals (**V2, V5***, **V1**). Reasons given were both cultural and religious. However, some religions allowed for male health professionals in circumstances where the health of the mother or baby was at risk. Women who were able to adjust to care from male health professionals in a traditionally female sphere reported that this was greatly eased by having health care staff who were sensitive and accommodating (**V2, V21** [AR]).

> *"I prefer a female doctor, but if she is not available I would agree to let a male doctor examine me. My first appointment was with a male doctor. He said, 'I will do a Pap smear - is this okay with you?' If I had refused, they would have given me another appointment after maybe six months, so I said that it was okay and he did it. Me and my husband understand that we have to adapt to our circumstances.*
> *I feel more comfortable with a female doctor. The presence of a male makes me embarrassed. I feel afraid and shy of males, especially if they examine sensitive areas. We are brought up like that. It is difficult for us to change."* (**V2** Migrant Arab Woman)

> *"I feel more comfortable with female doctors, but if there is a necessity for a male doctor I will agree to be examined by him. All Muslim women ask for female doctors because we don't like to be seen by males. But if there is no opportunity and there is a risk to our life it is halal in our religion to be seen by male doctor. We have to save our lives."*
> (**V2** Migrant Arab Woman)

Professionals' lack of knowledge regarding women's rights to care

In four studies women who were asylum seekers and refugees talked about health professionals being ignorant to their rights to care, even restricting access to formal interpreters (**V21** [AR]) and, in three of these, health professionals were restricting access to other services (**V5, V7** [AR]*, V16 [AR]). Women spoke of an inability or an unwillingness amongst agencies and health professionals to take responsibility for the care of asylum seekers who were due to be dispersed. This included deferring procedures, resisting or refusing GP registration and failing to refer women to agencies in their next location.

> *Women were not referred to a midwife unless they were unsuitable for dispersal* (V16, referring to asylum seekers)

The woman's relationship with her GP was critical in accessing antenatal care as the GP was often the only link women had with the healthcare system and the only source of information about what services were available to them (V6). In addition, women who were new to this country usually lacked informal social networks that could offer some advice on how the system worked.

Professionals' failure to direct women to appropriate care

Pregnant asylum seekers were not always referred to antenatal services by professionals in other services (**V15** [AR]).

"Someone staying at the hotel, who spoke French and Lingala, gave me the address [of the clinic], and told me to go to the clinic first. No one from the Refugee Council or NASS [National Asylum Support Service] told me where to go. NASS only told me that when I have contractions I should tell the hotel and they will call me an ambulance." (**V15** ^{AR} Asylum seeker)

Poor relationships with health professionals

Whether a GP consultation was perceived as helpful or not helpful depended on whether women felt they had been given all the information they need on the choices available and how the maternity care system worked (V14, **V15** ^{AR}). Women also spoke about feeling discouraged in asking for information from their GP. However, this was not a universal experience:

> *"My doctor explained everything when I was first pregnant. She told me you will see midwives every month ... They did treat me good."* (**V15** ^{AR} Asylum seeker)

Indeed, in some instances, a good relationship after care was initiated was important enough to override the preference among many Muslim women for female health care staff (**V1**).

However, when women talked about their experiences of antenatal care it appeared that confidence and trust in health professionals could be fostered by seeing the same midwives and building a supportive relationship with the healthcare professional (**V2**, V14, **V19**) this continuity of care improved the confidence in healthcare professionals in general. (**V2**)

> *". . .Knowing that I could like pick the phone up and talk to someone on a one-to-one basis sort of like really relaxed me and gave me the confidence to carry on."* (**V19** Woman of Pakistani origin)

5.2.3.3   Individual knowledge, culture, motivations and beliefs

Values and beliefs

Four studies (**V5, V9**, V16^{AR}, **V13**) reported women's individual knowledge or beliefs influencing initiation of antenatal care; these were studies of Bangladeshi and Gujarati women, refugees and asylum seekers, as well as a broad ethnic mix of women in the studies.

 Consulting a GP could be valued for confirming pregnancy (**V9**).

> *"if the baby is moving it is ok so after I see the baby is ok I not go back again because so much time and I do not understand what they are saying."*
> (V9 Chinese woman)

Where the benefits of antenatal care are not clear this presents a barrier especially for women who see continuing care as intrusive and inconvenient (**V13**), particularly where English is a second language (**V9**).

"I waited three months before I sent my husband to get a letter for hospital appointment from my family doctor. I did not want to tell anyone that I was pregnant because I didn't want to go too early... if you go too early to your doctor then you have to keep too many appointments. Once I have been given an appointment I do not like to miss it because if you miss any appointments the doctors ask too many awkward questions."
(**V13** Bangladeshi and Gujarati woman)

One study also reported that women who were anxious about being pregnant or where the pregnancy was not planned tended to present later in their pregnancy for antenatal care (**V5**).

There were six studies (V4, **V5**, **V9**, V11, **V13, V15**[AR]) where influences prior to booking related to a conflict with values and beliefs associated with antenatal care. Women in these studies were from Traveller communities, recent migrant Muslim women, asylum seekers, Chinese women and Muslim women of Bangladeshi and Gujarati origin.

Values and beliefs related to pregnancy as a solely female experience meant that talking to male health professionals (**V5**) or involving male members of the family was uncomfortable or inappropriate (**V9**). Related to this, Traveller women felt uncomfortable in having pregnancy literature or CDs in view of the men of the family.

Several times in these studies women portrayed pregnancy as a normal, natural event that did not require medical intervention (V4, *V5*, **V13, V15**[AR]), possibly because the course of pregnancy was decided by fate or God (V5, V11), and because extensive family commitments meant that there were other things considered more important to cope with (V4).

Cultural barriers
In half of the studies women talked about cultural barriers to care although this was rarely explicitly linked to initiation of care. The women in the included studies came from a broad ethnic mix and included asylum seekers and refugees as well as new migrants and British born minority ethnic women.

Asylum seekers and refugees encountered cultural differences in the structure of healthcare compared with their previous experience elsewhere, as well as additional difficulties in attending hospital based appointments due to lack of money to pay for travel, however there was a feeling that some referrals may have been to access some centrally held services, such as interpreters, rather than purely for health reasons (**V8, V7**[AR]). Women from the Traveller community expressed the view that pictorial information would be more useful and put Traveller women at ease if it featured women from their own community (**V8**).

Individual views, knowledge and beliefs also featured strongly as elements of a cultural barrier. These included a lack of understanding of the purpose of antenatal care, particularly if one had had a child before (**V13**), or had a limited understanding of English, which made communications with health professionals stressful and strained (**V9, V8**). There were cultural differences in the views around the nature of pregnancy and the involvement of health professionals. Women talked about their preferences for familiar, traditional approaches particularly a view that pregnancy was a

private, not public experience. As pregnancy was a natural event, referral to hospital for antenatal care conflicted with the view that hospitals were to be used only in an emergency (**V5, V13, V15** [AR],**V7**[AR]).

> *"I've tried as much as possible to stay away from hospitals; it's a place I don't like. I was healthy in my pregnancy, thank God. I didn't go in my pregnancy until the seventh month. I've been pregnant before in my country, and we didn't have doctors where I lived…. We don't see doctors unless there is an emergency ... When I went to see the GP at seven months pregnant, he was not very happy about it, but at the same time he didn't look as if he was concerned ... He is a very cold person."* (**V15** [AR] Asylum seeker)

Women from some BME communities often used general health services only where necessary, since they preferred to use expertise and support that was available within their community groups (**V5** mixed BME groups and women from Traveller communities).

5.3   Results: cross-study synthesis comparing intervention synthesis with views synthesis

We considered the sixteen interventions that were included in an earlier systematic review of the effectiveness of interventions to increase the early initiation of antenatal care in disadvantaged and vulnerable groups of women[1].

The earlier review concluded that:

> *Overall, the quality of evidence was poor. We did not identify any eligible randomised controlled trials (RCTs) and only one study - a retrospective cohort study with an additional pre-intervention comparator group - was assessed as having adequate internal validity.* This *study evaluated a Resource Mothers Program[i], which used paraprofessional women to deliver social support, health promotion/education and other assistance to pregnant adolescents at home and for one year after delivery. The evaluation, which was conducted in a predominantly black, non-urban US population found that the intervention was effective in increasing the proportion of pregnant adolescents initiating antenatal care by the fourth month of pregnancy*[1].

The interventions included in the present cross study synthesis are therefore interventions which have been used in a variety of population, predominantly in the USA, with the <u>aim</u> of increasing the early initiation of antenatal care in disadvantaged populations but which have not necessarily been found to be effective.

---

[i] The Resource Mothers Program (I9) evaluated by Rogers et al73. Rogers MM, Peoples-Sheps MD, Suchindran C. Impact of a social support program on teenage prenatal care use and pregnancy outcomes. *Journal of Adolescent Health* 1996;19(2):132-40.

5.3.1 Additional descriptive information about the interventions

We were able to establish contact with five of the authors of the original set of studies, and three were able to provide additional unpublished material. The interventions and sources of information used in the cross-study synthesis are listed in Table 6.

In total we obtained additional descriptive information about 11 of the interventions, including additional unpublished information (I2, I3, I12), additional related journal articles (I2, I4, I7, I9, I15, I16), online reports (I5, I7), and intervention/programme related websites (I1, I4, I6, I12 I16).

Table 6: Included interventions

Intervention ID	Primary report	Related reports/material
Community/outreach interventions		
I1	**Omaha Healthy Start** Cramer (2007)[74]	Omaha Healthy Start website[75]
I2	**Kansas Healthy Start Home Visiting Program** Daaleman (1997)[76]	Additional information provided by author[77] See also Shepherd and Starrett (2002)[78]
I3	**Community Mobile Health Van** Edgerley (2007)[79]	Additional unpublished material provided by author(s)[80]
I4	**Maternal Infant Health Advocate Service (MIHAS)** Hunte (2004)[81]	MIHAS website[82] See also Pestronk, Franks et al (2003)[83]
I5	**Minority Health Coalitions Early Pregnancy Project** Jewell (2000)[84]	See also Indiana Minority Health Coalition (2011)[85]
I6	**Resource Mothers Program** Julnes (1994) [86]	Programme information on Virginia Health Department website[87]
I7	**Strong Women, Strong Babies, Strong Culture Program** Mackerras (2001) [88]	See also Mackerras (1998)[89], Department of Health and Ageing (2005)[90], and Tursan d'Espaignet et al. (2003)[91]

Intervention ID	Primary report	Related reports/material
I8	**Asian Mother and Baby Campaign (Linkworkers)** Mason (1990)[92]	None identified. Authors contacted.
I9	**Resource Mothers Program** Rogers (1996)[73]	Additional published article provided by author: Rogers et al (1995)[93]
I10	**New Jersey's HealthStart program** Reichman (1996)[94]	None identified.
I11	**Rural Oregon Minority Prenatal** Program **(ROMPP)** Thompson (1998) [95]	None identified.
I12	**California Black Infant Health (BIH) Program** Willis (2004)[96]	Additional unpublished material provided by author(s)[97 98] Detailed information available from BIH programme website[99]
Clinic-based interventions		
I12	**Teen pregnancy clinic** Martin (1997)[100]	None identified.
I13	**Teen pregnancy clinic** Morris (1993)[101]	None identified.
I14	**Neighborhood Pregnancy Care** Mvula (1998)[102]	See also Boudreaux et al. (1997)[103]
I15	**Prenatal Care Assistance Program (PCAP***)** Newschaffer (1998)[104]	Current PCAP standards[105] See also evaluation by Turner et al (2000)[106] and Joyce (1999)[107]

5.3.2 Overview of the interventions

Twelve of the interventions were community based and/or involved outreach (I1-I12) and four were clinic-based (I13-I16).

Of the community based interventions, three consisted primarily of social support and/or home visits delivered by paraprofessional or lay women (I2, I6, I9). Of these, two evaluated interventions based on the concept of 'resource mothers' – trained paraprofessional women recruited from the local community - providing support to pregnant teenagers (I6, I9); and the third encompassed home visiting for socioeconomically disadvantaged "at risk" families (I2). One intervention consisted of the provision of 'linkworkers' in primary care and antenatal care settings (I8); and one involved a mobile health clinic offering primary, preventive and perinatal healthcare to women (I3). The remaining seven community based interventions were multi-component interventions including two or more of the following components: outreach, case management, home visiting, risk screening, help with transportation to appointments, advocacy and social support (I1, I4, I5, I7, I10, I11, I12).

Of the clinic based interventions, two involved 'teen antenatal clinics' (I13, I14), one involved a 'neighbourhood antenatal clinic' (I15) and one involved delivery of care through accredited clinics meeting defined quality standards (I16).

Six (I1, I4, I5, I6, I7, I11) and possibly seven (I9) of the community based interventions involved lay workers or paraprofessional staff indigenous to the targeted community. Three of the interventions were 'Healthy Start' programmes (I1, I2, I10).

The interventions are described in more detail in Table 7.

5.3.3 Restructuring the barriers and facilitators for the cross study synthesis

Following preparation of the intervention descriptions (Table 7), it was apparent that some of the barriers could usefully be grouped for the purposes of identifying ways in which they were addressed by the interventions. For example, barriers relating to need for information or advice and/or lack of knowledge or understanding of services tended to be addressed by the same element of the intervention irrespective of whether the barrier arose from the woman's life circumstances or from the complexity of the care pathways. Similarly, although language and communication barriers emerged under two headings in the views synthesis (lack of interpreters and barriers relating to use of children and other family members as interpreters and translators), this separation was not relevant to the ways in which the interventions tackled language and communication problems.

It was also apparent that some of the barriers predominantly affected asylum seekers and refugees. For the purposes of the cross-study synthesis, these were grouped together as a single category.

Therefore for the purpose of the cross-study synthesis barriers and have been grouped under the following headings, as shown in Table 8:

- Access to/preference for local services

- Structure and delivery of services/care and care pathways – barriers relating to Information, knowledge and understanding:

- Insensitive, indifferent or impersonal system/lack of emotional support

- Values , beliefs and cultural preferences

- Language and communication problem

- Barriers predominantly affecting asylum seekers and refugees

5.3.4   Matching views to evaluated intervention

Table 7 summarises the elements of each intervention that were considered to address or potentially address the barriers affecting UK BME women. Barriers specifically affecting asylum seekers and refugees are discussed separately in section 5.3.4.2

Table 7: Description of interventions and how they address the identified barriers

	Brief summary of intervention	Elements of intervention addressing barriers and facilitators relating to
Study I1 Cramer (2007)[74] **Setting:** Nebraska USA **Target population** Ethnic minority women ("Black women"). N.B. study sample not restricted by ethnicity. **Aim(s) of the intervention** Intervention was "designed to reduce local disparities in birth outcomes".	***Omaha Healthy Start*** A local case management and care coordination programme which employed "*Black outreach workers indigenous to the local community, [..] with strong community connections to local civic and/or faith-based organizations in the community […].The outreach workers identified and enrolled pregnant women residing in the targeted area by networking with local churches, clinics, social service agencies, community groups, community leaders and businesses for case finding. Participants were assigned to case managers (i.e. social workers or public health nurses) and received weekly contact through home visits, office visits or telephone calls. Case managers focused on linking participants with medical homes, ensuring transportation to medical and referral appointments, scheduling medical visits, screening and referring participants for risk factors (e.g. depression, nutrition, housing, substance abuse, etc), and providing follow-up after missed medical and referral appointment. Participants received patient education from their case manager, who taught the comprehensive prenatal education program developed by the National Healthy Start Program…*"[74].	**Access to/preference for local services** The outreach workers work locally within a defined geographical area but it is unclear if antenatal care itself is available locally. Some assistance is provided with ***transport to appointments*** which may help women overcome some access problems but will not necessarily address the preference of some BME groups for services within the local community. **Structure and delivery of services/care and care pathways** Outreach workers and case managers ***assist women with referral*** and are presumably ***knowledgeable about the services*** available thus overcoming some of the identified barriers arising from women's lack of knowledge about available services. **Insensitive or impersonal system/lack of emotional support** Insufficient information to assess. **Values beliefs and cultural preferences** The outreach component is delivered by ***women indigenous to the local community***. Also, Healthy Start programs adhere to the principle of '***cultural competence'***, i.e. staff should understand, acknowledge, and respects cultural differences among participants; staff and materials used should reflect the cultural, linguistic, geographic, racial and ethnic diversity of the population served. **Language and communication problems** Insufficient information to assess.

	Brief summary of intervention	Elements of intervention addressing barriers and facilitators relating to
Study I2 Daaleman (1997)[76] **Setting:** Kansas, USA **Target population** Socioeconomically disadvantaged women ("at risk", and in receipt of WIC). **Aim(s) of the intervention** "The Healthy Start Program...seeks to enable at-risk families to become healthier and more self-sufficient by improving access to early intervention services".	***Kansas Healthy Start Home Visiting (HSHV) Program*** A community-based lay home visiting programme with the broad aim of supporting at risk families. "*Pregnant women, infants, adoptive families and families who have lost a newborn are eligible for HSHV services. Families can be referred into the program through multiple sources (physicians, hospital, social service agencies). The home visitor is an experienced parent with a minimum of a high school diploma… who has undergone an orientation to home visiting under the supervision of a public health nurse. The role of the home visitor is to provide education, support, resource information and referrals to the family, in addition to screening for current and potential problems. No childcare or transportation services are provided by the home visitor.*" [76] Health visitor training emphasizes the following roles: • **"*Advocate*** *– Bridging cultural and other barriers to early and effective prenatal care/services; to advise or accompany pregnant women to prenatal appointments and other community services and to assist children and families as needed.* • ***Collaborator*** *– Working with numerous support and resource services available to secure appropriate services for women, children and families.* • ***Consultant*** *– Finds answers to families' questions about their pregnancy, relationships, and parenting.* • ***Mobilizer*** *– Observation and early identification of unhealthy behaviors, disease processes, injury potential, and other lifestyle occurrences with prompt referral to supervising registered nurse.* • ***Mediator*** *– Seeks solutions and assists families to work through problems that may arise.* • ***Model*** *– Demonstrates positive lifestyle and parenting*	**Access to/preference for local services** Visits take place in the woman's home but it is unclear to what extent other services are local. **Structure and delivery of services/care and care pathways** The HVs are required to be ***knowledgeable about local services and providers*** and can thus overcome some related barriers once the women has been referred into the service. The HV is also required to have "**knowledge of and involvement in community networks**" in order to recruit families into the program. However, the program is aimed at a diverse group of at risk families and parents and seem most likely to address barriers to care experienced by women who are already in the program when they become pregnant, i.e. are already parents. Referrals into the program come from multiple sources and it is unclear to what extent lack of ***knowledge on the part of potential referrers*** may remain a barrier. HVs are hired based on "personal qualities of warmth, self-assurance, cultural sensitivity and competence with parenting"[77] which may increase the level of ***emotional support*** provided to women, but **lack of sensitivity** on the part of other health care staff does not appear to be explicitly addressed. The HVs **knowledge and cultural competence** combined with the **advocacy role** and availability to accompany pregnant women to prenatal appointments could help address a number of the structural/care pathway related barriers relating to **difficulty navigating the service, obtaining information, and perception that services are impersonal or indifferent.** **Insensitive or impersonal system/lack of emotional support** HVs appear to be trained to provide a supportive, personalised service. **Values beliefs and cultural preferences** As a culturally competent 'collaborator' and 'advocate', the HV could potentially help the woman negotiate culturally appropriate services (e.g. female staff) and the

	Brief summary of intervention	Elements of intervention addressing barriers and facilitators relating to
	behaviors. • **Coach** *– Actively and attentively listens to what families need or want without being judgmental, and supports families efforts to obtain these.* • **Motivator** *– Motivates families to make lifestyle changes and engage in healthy behaviors with the ultimate goal of a healthy pregnancy, and healthy children.* • **Partner** *– Supporting families through local community, surrounding county, and state-wide collaborative efforts*." [77] HV training emphasizes the need for cultural competence, and recognition that • Family cultural and personal values may not be perceived as compatible with home visitors; • other family members (such as father, grandmother) may be influential in encouraging or discouraging parent's involvement in services N.B. This evaluation was designed to investigate whether prior exposure to this programme (i.e. before pregnancy) had an effect on the use of antenatal care in the current pregnancy.	HV is expected to provide education. However, in the context of the Kansas HSHV program, the HV would presumably not have been required to respond to some of the specific cultural values and beliefs encountered in UK BME women. **Language and communication problems** HVs are required to "Speak bilingually, if population needs indicate this"[77]. Although it is assumed that HVs do not routinely accompany women to their antenatal care appointments, but where this occurs the presence of a **bilingual advocate** might overcome some of the communication and other barriers mentioned by women who do not communicate confidently in English.
Study I3 Edgerley (2007)[79] **Setting:** California, USA **Target population** Socioeconomically	**Women's Health Van** Mobile health clinic, staffed by culturally competent, bilingual staff - an obstetrician-gynaecologist and a bilingual nurse practitioner - which travels to low income neighborhoods to provide regular sessions at community locations. The van provides free primary, preventive and perinatal health care predominantly to uninsured women with *"limited knowledge about using the local health service"* [108]. The services most	**Access to/preference for local services** The van travels to and provides services in the areas/communities where the women live. **Structure and delivery of services/care and care pathways**

	Brief summary of intervention	Elements of intervention addressing barriers and facilitators relating to
disadvantaged women, primarily monolingual Spanish speaking immigrants	commonly provided are *"contraception, annual exams, pregnancy diagnosis and related care, diagnosis and treatment of illness, health education, referrals and immunizations."*	The intervention is specifically aimed at women with limited knowledge of the local health care system. The van does not just target pregnant women but many of the services offered are pregnancy related.
Aim(s) of the intervention "to address barriers to health care access such as language, transportation, and cost for undocumented immigrants and the uninsured in our suburban community"	The service is publicized by flyers distributed to/by community workers, local social service providers (e.g. food banks) and via local churches. Women typically learn about the van through word-of-mouth. The Van also seeks to attract patients by providing other services, such as free children's clothes (charity donations) and other 'give aways'.	The services offered by the van are publicized through 'traditional' channels but also through 'word-of-mouth' in the target community. The van provides a first port of call for women who may have limited knowledge of how to access services or problems accessing services because of language difficulties and provides a combination of services, information/education and direct assistance with accessing services. For example, the van provides a pregnancy testing service and both makes antenatal clinic appointments for them and helps educate women about services
"to improve access to prenatal care"	The van parks in locations close to the target population where there are local facilities (WCs, waiting areas, etc) that clients can use. These include churches, schools and community centres. In the case of schools, they target both mothers dropping off/picking up children and the high school children themselves[108].	available. The intervention appears to directly address some of the barriers mentioned by UK BME women, including barriers relating to lack of information or knowledge, difficulties navigating the system without prior knowledge and the complexity of the system.
To "introduce newly arrived immigrant women to local health care options." [108]	The van has two examination rooms, an ultrasound machine and lab collection services. A variety of free walk-in or appointment services are provided. Women with a positive pregnancy test receive *"a dating ultrasound on the van, initial prenatal care, counseling regarding healthy pregnancy and are given a packet of information regarding prenatal vitamins. The van acts as a bridging device as the women are then referred to local community clinics for further prenatal visits"* [79]. Staff seek to develop a trusting relationship with clients and help the women enter the health care system by making the antenatal clinic appointment and calling to make sure that the woman receives care.	Staff seek to educate women about available services which may help women better understand the purpose of care. The van does not aim to provide ongoing antenatal care (except in exceptional cases) but women can make return visits to the van to receive health services.

Insensitive or impersonal system/lack of emotional support

Staff seek to establish a "trusting relationship" with clients.

Values beliefs and cultural preferences |
| | The van's target population has a high prevalence of conditions and 'lifestyle' factors that may compromise the woman or her fetus, e.g. hypertension, infection, diabetes, lack of immunization, poor diet, smoking, alcohol or drug abuse, domestic violence. These health issues are tackled both prior to conception and during pregnancy. | Staff are bilingual and 'culturally competent' but it is not known how specific cultural preferences and/or beliefs in the target community are addressed.

Language and communication problems

Staff providing the intervention are bilingual. |

	Brief summary of intervention	Elements of intervention addressing barriers and facilitators relating to
Study I4 Hunte (2004)[81] **Setting** Michigan, USA **Target population** Ethnic minority women ("African-American women"). Eligible women must be low-income and/or have experience with specific risks such as single parenting, social isolation, teen parenting, history of abuse or neglect (as a victim or perpetrator), depression, low level of education or intellectual functioning, or high risk of HIV/AIDS. **Aim(s) of the intervention** The 4 objectives of the MICHAS intervention are: 1) to identify pregnant African-American women early in their pregnancies; 2) to assist identified participants in navigating the prenatal care system; 3) to identify resources that assure services are adequate to reduce the stress associated with health barriers; and 4) to engage participants in other activities that assist in addressing issues of race and ethnicity as	*Maternal Infant Health Advocate Service* The MIHAS programme sits within a broader initiative encompassing three themes: reducing racism on the part of healthcare workers and others, "*retooling*" the perinatal care system to "*more effectively serve people of colour*", and fostering community mobilisation[83]. The reducing racism strand of the broader programme included a series of 'undoing racism' seminars and workshops and training in 'cultural competence for healthcare' aimed at the medical care workforce in training. MIHAS sits in the 'retooling perinatal care' theme. It targets specific geographical areas with high numbers of African-American infant deaths. The programme employs female paraprofessional advocates, "*indigenous to the high-risk community, with life experiences similar to those they work with. [They] are trained to provide social support to pregnant and parenting women and to connect families to resources to address basic needs such as housing, food and medical care*". Their purpose is "*to improve the interaction between high-risk pregnant women and infants and the system of care*"[83]. The Advocates "*work one-on-one with individuals and sponsor monthly support groups, a yearly picnic,...*". Case conferencing is used to coordinate services between Advocates and other health workers and women in the programme receive "*intense case management services*". The role of the Advocates has evolved: they found that encouraging clients to seek antenatal care was not enough and that clients "*expressed feelings of discomfort during medical appointments*", attributable to "*an inability to clearly understand their physicians due to both language barriers and feeling that their physician did not spend much time with them*", and also to feeling that their physician 'talked down' to them[81]. The presence of the Advocates "*enables clients to ask questions and get information without feeling intimidated by medical staff*". Because many clients have poor literacy, the Advocates also help with form filling and provide other practical assistance in terms of seeking employment or continuing their education.	**Access to/preference for local services** The service targets and is provided within specific geographical areas. Advocates sometimes accompany women to antenatal care appointments which might help overcome concerns about travelling outside the local neighbourhood expressed by some BME groups. **Structure and delivery of services/care and care pathways** The Advocates seek to identify women early in pregnancy and provide support through to the infant's first birthday. Advocates specifically aim to overcome the structural problems that women may face understanding and navigating services. They sometimes accompany women to antenatal care appointments, which enables the women to ask questions and possibly may give them a greater sense of control and feeling that the system is sensitive and responsive to their needs. **Insensitive or impersonal system/lack of emotional support** The Advocates are trained to provide social support and appear to provide a personalized service to clients. Where necessary they provide an advocacy role during antenatal appointments. **Values beliefs and cultural preferences** The Advocates are indigenous to the community served so presumably have an understanding of the cultural preferences and values of their clients. **Language and communication problems** Presence of the Advocates at consultations appears to help the women overcome language barriers and the advocates also provide assistance where literacy is a problem.

	Brief summary of intervention	Elements of intervention addressing barriers and facilitators relating to
they relate to infant mortality	The intervention is designed to identify women early in pregnancy: women are recruited through self-referral, advocate case-finding and through referral from other services and community programmes (e.g. WIC, the local health department).	

Study I5

Jewell (2000)[84]

Setting Indiana, USA

Target population Ethnic minority women ("minority women").

Aim(s) of the intervention "..to eliminate cultural barriers to care and to conduct outreach to pregnant women in the community for early entry into prenatal care"

Minority Health Coalitions Early Pregnancy Project

The Minority Health Coalition is a statewide organization which has developed from a grassroots volunteer organization and has the overall aim of reducing minority health disparities in the state. The coalition supports individual projects, such as the Early Pregnancy Project, but has broader goals which include, for example, raising awareness of health disparities amongst policy makers and others, engaging and mobilizing the community and increasing the interest of minorities in becoming healthcare workers.

The early pregnancy project was designed to increase access to early antenatal care through overcoming cultural barriers to care and *"by employing outreach to pregnant women in the community for early entry into prenatal care"*. The project employed minority professional and paraprofessional staff who *"provided social support in various ways from individual support via contact with mothers in the project offices and on home visits, to group support by facilitating linkages of social support with significant others and holding support group meetings of the project mothers. Other interventions included referrals to community services, health education and transportation."* Staff also provided *"advocacy for the mothers if barriers occurred in navigating the health and social service systems in their communities."* [84]

Project staff *"assessed the cultural needs of the women and provided culturally appropriate emotional and social support."* Staff also *"engaged in cultural brokering by connecting the women with health and social services providers and mediating potential or actual cultural conflict that may have occurred between the women and providers."* [84]

Access to/preference for local services

Home visits and outreach are local; unknown if all services are local. Help is provided with transportation, but details of this are not reported.

Structure and delivery of services/care and care pathways

Outreach by project support staff, including advocacy, is designed to help women overcome difficulties navigating services. It is assumed that the outreach workers provide information to help women understand and use available services. The ethos of the project and the use of minority outreach workers could potentially help women feel that the system is more personal, although it is unclear whether once referred into antenatal care the problems relating to the system being insensitive to their needs may remain. The social support provided may address women's need for emotional support.

Insensitive or impersonal system/lack of emotional support

The staff aim to provide "culturally appropriate emotional and social support".

Values beliefs and cultural preferences

The project explicitly aims to remove cultural barriers and employs outreach workers from the target minority population, but the nature of the cultural barriers in the target population are not stated and specific details of how cultural barriers are tackled are not provided. The use of minority outreach workers may play a part and it appears that broader activities undertaken by the Minority Health Coalition to tackle racism and to encourage more individuals from minority communities to become healthcare workers may contribute.

	Brief summary of intervention	Elements of intervention addressing barriers and facilitators relating to
		Language and communication problems Not explicitly mentioned.

Study I6 Julnes (1994)[86] **Setting** Virginia, USA **Target population** Teenagers. **Aim(s) of the intervention** To reach high-risk pregnant teens; to impact on their health-related behavior; to improve perinatal health outcomes.	***The Norfolk Resource Mothers Program*** The program uses "*para-professional home visitors who are similar to the teens in race and socio-economic status.*" The resource mothers "*reach out to adolescents considered at high risk for inadequate prenatal care and poor pregnancy outcomes*" and are trained to "*assist adolescent parents and their families with the non-medical dimensions of pregnancy and child care.*" They are "*responsible for recruiting teens for the program, encouraging them to get prenatal care, providing practical assistance to the teens and their families, and acting as a liaison between the teens and the relevant public agencies*". An advantage of lay visitors is that "*they often grew up in the same cultural milieu as the teens they serve (and were often teen mothers themselves) and so may be in a better position to provide empathy and social support.*"[86]	**Access to/preference for local services** Visits are assumed to take place in the woman's home but it is unclear to what extent other services are local. **Structure and delivery of services/care and care pathways** The service reaches out to and recruits pregnant teenagers so may overcome some barriers relating to **lack of information** or **the knowledge needed to access services.** However, it is not known how the resource mothers identify the pregnant teenagers. The resource mothers act as a liaison between the teens and relevant agencies, but it is unclear whether the resource mothers explicitly aim to have an advocacy role. It is unclear whether or not the resource mothers are trained to provide health-related information, e.g. about the purpose of antenatal care. **Insensitive or impersonal system/lack of emotional support** The programme uses lay outreach workers who have a similar background to the target population which may enable them to provide "empathy and social support." **Values beliefs and cultural preferences** The resource mothers have a similar background to the target population. Their **familiarity with the culture of their clients** *"may help them reach high-risk clients who might otherwise be missed...."*. **Language and communication problems** Unclear if this barrier is relevant in the population targeted by the programme.

	Brief summary of intervention	Elements of intervention addressing barriers and facilitators relating to
Study I7 Mackerras (2001)[88] **Setting** Northern Territory, Australia **Target population** Indigenous women (Aboriginal women). **Aim(s) of the intervention** To increase infant birthweight by earlier attendance at antenatal care and improved maternal weight status.	***Strong Women Strong Babies Strong Culture*** The aim of the programme was for "*senior women within Aboriginal communities to help younger Aboriginal women prepare for pregnancy, and to support pregnant Aboriginal women by encouraging them to visit clinics for antenatal care early in their pregnancy, by providing advice and encouragement about health pregnancy management in relation to nutrition …, by promoting the adoption of safe practices such as not taking alcohol and smoking during pregnancy, and by reinforcing the need to seek adequate and timely medical help and to take prescribed medicines*"[91]. The programme workers inform women about "*Western health and medical practices related to pregnancy and [encourage] greater use of antenatal healthcare*". The intervention does not operate according to a strict protocol. "*Intervention services include community-based maternal education and support by respected community women; advice on nutrition; reduced smoking and alcohol use; early antenatal care; testing and treatment for sexually-transmitted diseases; advice on seeking medical care and adhering to prescribed medication*"[90].	**Access to/preference for local services** No details provided. **Structure and delivery of services/care and care pathways** The programme workers encourage women to seek antenatal care and it is assumed provide information to enable them to do this. They also explain "Western medical practices related to pregnancy" which presumably helps women understand the purpose of antenatal care. **Insensitive or impersonal system/lack of emotional support** It is unclear whether the programme addresses feelings women might have about not being treated as individuals or about lack of emotional support. **Values beliefs and cultural preferences** Employing senior Aboriginal women to deliver the programme was expected to lead to "a more culturally appropriate and attuned package of supporting care and education". The programme seeks to address some of the cultural preferences and values of clients by including traditional cultural practices relating to childbirth. **Language and communication problems** No information provided.
Study I8 Mason (1990)[92] **Setting** Leicester, UK **Target population** Ethnic minority women (Gujarati, Punjabi, Hindi, Urdu and	***Asian Mother and Baby project*** Eight Asian link workers based across the two main city maternity units and four selected GP surgeries. Linkworkers were trained women who spoke fluent English and at least one Asian language, who acted as facilitators and interpreters "*whilst also fulfilling an educative role*". They worked alongside health professionals in both hospitals and community antenatal clinic.	**Access to/preference for local services** The linkworkers were placed in existing healthcare settings, including local primary care practices. **Structure and delivery of services/care and care pathways** The bilingual linkworkers are intended to have a facilitative and educative role and could potentially help women navigate services and help them understand the

	Brief summary of intervention	Elements of intervention addressing barriers and facilitators relating to
Bengali speakers). **Aim(s) of the intervention** "One of the aims of the national campaign was to encourage women to attend for their antenatal care early in pregnancy" "The linkworker scheme was provided for pregnant Asian women in order to improve i) outcome of pregnancy; ii) communication with health professionals; iii) health education knowledge"		purpose of care. **Insensitive or impersonal system/lack of emotional support** No information provided. **Values beliefs and cultural preferences** No information provided. **Language and communication problems** The availability of bilingual linkworkers should in theory help women who do not speak English confidently to communicate better with health professionals and others. In practice, the evaluation of the programme concluded that the benefits of the programme were mainly seen in Asian women who had a good understanding of English, suggesting that this intervention may not reduce language related barriers in BME women.
Study I9 Rogers (1996)[73] **Setting** South Carolina, USA **Target population** Teenagers. **Aim(s) of the intervention** To increase prenatal care use and to improve pregnancy outcomes (reduce the risk of low birthweight and preterm birth) among teenagers <18.	*Resource Mothers Program* Paraprofessional women ('resource mothers') from the local community were given intensive training on a range of subjects including pregnancy and infant care, nutrition and communication skills. Resource mothers were selected for "personal warmth, successful personal parenting experience, knowledge of community resources, demonstrated ability to accept responsibility, and evidence of natural leadership." Resource mothers provided monthly "*supportive, educational home visits*" to pregnant teenagers (<18) who were recruited through outreach, peer-referral or referral from other agencies. Resource mothers "*actively recruited [] teenagers to the program through community education and outreach activities (e.g., making presentations, distributing brochures). Referrals came from a variety of sources such as the Special Supplemental Food Program for Women, Infants, and Children (WIC), prenatal clinics, human services agencies, schools, churches, private physicians, and*	**Access to/preference for local services** The resource mothers work in the woman's community and make home visits. It is not known whether antenatal services are provided locally. Assistance is provided with transportation which may help some women overcome access problems **Structure and delivery of services/care and care pathways** Resource mothers proactively identify and recruit pregnant teenagers and then help them navigate the system by acting as advocates, assisting with referral, transportation and appointments. The resource mothers are required to be knowledgeable about services and can thus overcome barriers relating to women's lack of knowledge about services. Active identification and recruitment of pregnant women into the programme may address barriers relating to need for prior knowledge. However, the view that pregnancy is a private matter expressed by some UK BME women may mean that such an approach would be less successful in

	Brief summary of intervention	Elements of intervention addressing barriers and facilitators relating to
	teenagers already in the program"[73].	these UK groups.
	The intervention facilitated the use of prenatal care through advocacy, arranging transportation and referral to other services. The resource mother "*acted as an advocate for the participant by bringing her needs to the attention of staff within health and community agencies*", and helped teenagers "*use the health care system*"[73].	The resource mothers provided "expressive social support" which may have addresses needs for emotional support. **Insensitive or impersonal system/lack of emotional support** Resource mothers aim to provide "expressive social support".
	The resource mothers directly provided *"expressive (e.g., sharing of friendship, acceptance, understanding) and instrumental (e.g., giving of educational information, assistance with transportation) social support"*[73].	**Values beliefs and cultural preferences** The recruitment of resource mothers from the local community may have led to a more culturally sensitive service. **Language and communication problems** No information/not applicable.
Study I10 Reichman (1996)[94] **Setting** New Jersey, USA **Target population** Socioeconomically disadvantaged women (Medicaid recipients), **Aim(s) of the intervention** To improve birthweight.	*HealthStart program* Healthy Start programmes in general seek to address multiple issues, including: • *Providing adequate prenatal care* • *Promoting positive prenatal health behaviors* • *Meeting basic health needs (nutrition, housing, psychosocial support)* • *Reducing barriers to access* • *Enabling client empowerment* The New Jersey programme's key features are "*an increased number of prenatal visits. Increased provider reimbursement, case coordination with other social programs and integrated health support services such as psychological counseling and health education. Case managers, trained in cultural sensitivity, provide individualized plans of care and follow-up consultations throughout the pregnancy and for 60 days postpartum. To*	**Access to/preference for local services** No Information. **Structure and delivery of services/care and care pathways** Case managers may encourage and provide information to enable women negotiate services. **Insensitive or impersonal system/lack of emotional support** Insufficient information to assess. **Values beliefs and cultural preferences** Case managers are trained in "cultural sensitivity" but no further information is provided.

	Brief summary of intervention	Elements of intervention addressing barriers and facilitators relating to
	encourage women to get prenatal care early, community outreach efforts are mandated for all HealthStart providers. A system of presumptive eligibility [enables] financially [Medicaid] eligible unenrolled pregnant women to obtain early care"[94].	**Language and communication problems** No information.
Study I11 Thompson (1998)[95] **Setting** Oregon, USA **Target population** Rural, low-income Mexican-American women **Aim(s) of the intervention** Not explicitly stated, but assumed to be to improve antenatal care utilization and to improve pregnancy outcomes	***Rural Oregon Minority Prenatal Program (ROMPP)*** The intervention "*blended concepts of culturally appropriate care, outreach, nursing case management, and home visitation*" to women, many of who were undocumented migrants without Medicaid coverage. Nursing case management "*emphasized facilitation and advocacy*"[95]. The intervention was delivered by a community health nurse and outreach workers. The Community Health Nurse/case manager "*was responsible for assessment, planning, coordination, and evaluation of nursing care. She assessed the client's personal and social resource and biomedical status and was familiar with the resources and services available in the community. A major emphasis …was facilitating access to prenatal care*"[95]. Most visits occurred in the participant's homes. These visits addressed four goals: to inform and motivate women who are reluctant to use services, to provide care responsive to the woman's circumstances, to improve health habits and behaviours (including early enrollment in antenatal care), and to provide social support. Culturally appropriate care was operationalized … "*by a bilingual and bicultural outreach worker who functioned as a cultural broker, to interpret meanings of behaviours, customs and events to both client and provider, facilitate communication and enable cooperation.*" The outreach worker was responsible for "*case-finding and recruitment, follow-up to ensure continuity of care and reduce social isolation, and advocacy to lower barriers and increase the acceptability and accessibility of care. She provided transportation to prenatal care*" and also "*translated as needed.*"[95]. Both the case manager and the outreach worker were well known in the local Mexican-American community.	**Access to/preference for local services** Home visits provided by the outreach worker; help provided with transportation (although the evaluation noted that problems with transportation persisted). **Structure and delivery of services/care and care pathways** The case manager and outreach worker are familiar with services available so are able to help women enter antenatal care and navigate services. It is unclear how the workers identify pregnant women but it is stated that they are known within the community therefore it may be through word-of mouth and/or previous contact with the woman. **Insensitive or impersonal system/lack of emotional support** Insufficient information to assess. **Values beliefs and cultural preferences** The programme uses bilingual and bicultural outreach workers to act as "cultural brokers" who seek to increase cultural understanding both on the part of the women and the providers. It is unclear, however, how the outreach worker interact with and/or influence providers (see below for comment on limitations) **Language and communication problems** Programme workers are bilingual and bicultural but language/communication problems that women may encounter with care elsewhere do not appear to have been fully addressed (see below for limitation) **Possible limitations** Furthermore, the researchers who evaluated the programme noted *"the*

	Brief summary of intervention	Elements of intervention addressing barriers and facilitators relating to

persistence of barriers to prenatal care… [These included] attitudes among both clients and providers, financial concerns, problems with transportation, and language differences." [95]

The evaluation found that programme staff considered that the primary "*attitudinal barrier*" amongst clients was a "*culture-based tendency not to seek preventive services*".

Women, however, appears to value the programme, but may have used it as a substitute for antenatal care.

The programme did not appear to have successfully addressed cultural issues arising during prenatal care. For example, the evaluation of the programme found that women talked about the embarrassment involved in visiting the doctor, both because of physical examinations and because of the intimacy of the questions that they asked. The providers also *"were not accustomed to the demands of this patient population and faced little prospect of financial reward"*. The programme "*had little direct control of certain aspects of culturally appropriate care, such as provider attitudes toward the pregnant woman's cultural heritage, the provision of culturally appropriate educational materials, and the negotiation of culturally sensitive options for the plan of care*"[95].

Study I12

Willis (2004)[96]

Setting California, USA

Target population Ethnic minority women ("African-American women").

Aim(s) of the intervention "was funded...to improve the health of African-American women, infants, and children,

Black Infant Health (BIH) Program
Provided "*augmented services during the prenatal period*", outreach services and telephone and home-based support. The exact services varied by programme site, but all sites implemented the "prenatal care outreach" model: community-based outreach workers who worked to "*identify and link pregnant African-American women to BIH, general prenatal care, and other appropriate services*"[96].

Following the evaluation, the programme was modified and rolled out more widely. A full description of the BIH programme, including the conceptual framework, detailed policies and procedures and assessment forms and documentation can be found on the BIH website[99].

The goal of the program is "*to provide services in a culturally-relevant*

Access to/preference for local services

Home visits.

Structure and delivery of services/care and care pathways

Outreach efforts to identify and recruit women early in pregnancy combined with case management may address barriers relating to lack of information or understanding about services or care pathways.

Insensitive or impersonal system/lack of emotional support

The programme aims to empower women and provide social support. Through contact with the FHA and through the group intervention, the programme itself has

	Brief summary of intervention	Elements of intervention addressing barriers and facilitators relating to
thereby reducing African-American infant mortality" Not clearly stated, but assumed to be to reduce LBW and PTB	*manner that respects clients' beliefs and cultural values while promoting overall health and wellness, and recognizing that women's health and health related behaviors are shaped by non-medical factors (e.g., the effects of stress related to limited social and economic resources as well as racism and discrimination)."* The BIH programme has been developed *"to address these social determinants of health in ways that are relevant, culturally affirming and empowering to clients"*[99]. The four guiding concepts are that the services should be culturally relevant, client-centered, strength based (i.e. build on the clients strengths) and employ a cognitive skill building approach. Women are recruited through a combination of outreach activities focused on: referrals from other providers/agencies; direct outreach (street outreach, participation at community health fairs and other events, etc); and media outreach. Women may also 'self-refer. 'Protocols' for outreach activities and community engagement are available on the BIH website[99]. The programme includes a group intervention (20 sessions) designed to encourage empowerment and social support in the context of a life course perspective. This is combined with enhanced *"social-service oriented"* case management provided by a Family Health Advocate that focuses on *"identifying and triaging client needs and facilitating client access to prenatal and postpartum supportive services (and to medical care as needed), while at the same time, working with the client to identify and build on her strengths and resources to problem-solve, and obtain the services and support she needs"*[99].	the potential to provide a sensitive and supportive service but is unclear whether this would address clients feelings about the care received from healthcare providers. **Values beliefs and cultural preferences** The programme aims to provide services in a *"culturally relevant way that respects clients' beliefs and values while promoting overall health and wellness…"*. Further details are not provided. **Language and communication problems** No information.

	Brief summary of intervention	Elements of intervention addressing barriers and facilitators relating to
Study I13 Martin (1997)[100] **Setting** Ohio, USA **Target population** Teenagers aged 14-17 **Aim(s) of the intervention** To increase "compliance" with care and improve outcomes	***Teen pregnancy clinic***, set up to provide comprehensive antenatal care to pregnant teenagers.	The services provided are not described in detail to assess barriers addressed.
Study I14 Morris (1993)[101] **Setting:** Texas, USA **Target population** Teenagers aged <18 **Aim(s) of the intervention** Not explicitly stated, but assumed to be to improve antenatal care utilization and to improve pregnancy outcomes.	***Teen pregnancy clinic***, provided general antenatal care with a special emphasis on education, social and nutritional support. Teens received gifts on appropriate weight gain.	The services provided are not described in sufficient detail to assess barriers addressed. The authors comment that the clinic was "*designed to facilitate social interaction with similarly situated peers, suggesting that… [the teens] may be building social networks and supporting relationships*".
Study I15 Mvula (1998)[102] **Setting** Louisiana, USA **Target population** Socioeconomically	***Neighborhood Pregnancy Care*** An ambulatory clinic providing comprehensive family planning and antenatal care, located "*adjacent to two housing projects in New Orleans*". Care is provided by a collaborative team of obstetricians, and advanced practice nurses. The programme aims to provide continuity of care, individualized antenatal education and nursing case management.	Antenatal services are provided locally. No other relevant information reported.

	Brief summary of intervention	Elements of intervention addressing barriers and facilitators relating to
disadvantaged women (low income). **Aim(s) of the intervention** Not explicitly stated, but assumed to be to improve antenatal care utilization and to improve pregnancy outcomes.		
Study I16 Newschaffer (1998)[104] **Setting** *New York State, USA* **Target population** Socioeconomically disadvantaged women (Medicaid recipients), though intervention evaluated in HIV-positive substance abusing women. **Aim(s) of the intervention** To "enhance Medicaid prenatal care in improving the birth outcomes" in the target population	***Prenatal Care Assistance Program (PCAP)*** Delivery of antenatal care through accredited Medicaid clinics meeting the PCAP quality standards. "*The program's broad components included (1) patient outreach to facilitate timely prenatal care, (2) meeting frequency and content of prenatal care standards set by the American College of Obstetricians and Gynecologists, (3) comprehensive risk assessment for adverse outcomes, (4) development of a prenatal care plan and coordination of care, (5) nutritional services, (6) health education, (7) psychological assessment, and (8) HIV-related services involving testing, counseling, and management referrals*"[106]. Current standards include: "*Prenatal care providers shall promote the delivery of prenatal care services in a culturally sensitive/competent manner to all pregnant women including those with limited English proficiency and diverse cultural and ethnic backgrounds. Interpretation services must be offered to patients whose primary language is not English, in person when practical, or via telephone if a translator is not immediately available.*"	The intervention involves defining standards for services to be provided. These require, for example that "*Prenatal care providers shall promote the delivery of prenatal care services in a culturally sensitive/competent manner to all pregnant women including those with limited English proficiency and diverse cultural and ethnic backgrounds. Interpretation services must be offered to patients whose primary language is not English, in person when practical, or via telephone if a translator is not immediately available.*" However, there is no further information available about how these standards are implemented in PCAP clinics.

Table 8: Grouped barriers and facilitators

	Structure and material life circumstances	The care pathway for pregnant women	Individual knowledge, culture, motivations and beliefs	Family and social
Barriers and facilitators applying to BME women	**Lack of or inaccessibility of local services**			
	Information and knowledge		**Values, beliefs and cultural preferences**	
	Difficulties in navigating services **Lack of joined-up services** **Information has to be sought out, not offered:** • Access dependant on prior knowledge of entitlements and services available • Disadvantaged women not directed to services created for them • HP lack of knowledge of services	**Women's lack of knowledge regarding purpose of care, and choices available** **Women's lack of understanding of services** • **Complexity of system** • **Lack of confidence to ask for information or access to services**	**Values and beliefs** • Cultural preferences for female healthcare staff; • Religious acknowledgement of the need to use male health care staff in exceptional circumstances • Belief in value of initial GP consultation (FACILITATOR) • Views of pregnancy as natural and not requiring medical intervention • Medical intervention is not necessary, course is decided by fate • Concern that medical intervention may be harmful • Anxiety about being pregnant/non-acceptance of pregnancy	**Cultural Barriers** • Experience of different structures of healthcare in country of origin • Pregnancy viewed as a private experience • Lack informal social networks that could offer advice and support
	System that is insensitive indifferent or impersonal			
	System that is indifferent or impersonal • **Lack of emotional support** **System that is insensitive** • **Lack of recognition of women as individuals with complex needs** • Women experience loss of control	**Poor relationships between women and professionals** • Confidence and trust in health professionals (FACILITATOR)		
	Language and communication			
	Language barriers • Lack of timely, appropriate professional interpreters			**Language barriers** • Reliance on family members, including children, and other informal interpreters to translate literature

Table 8 (cont)

	Structure and material life circumstances	The care pathway for pregnant women	Individual knowledge, culture, motivations and beliefs	Family and social
Asylum seekers	**Barriers affecting asylum seekers and refugees**			
	No fixed address prevents registration for care • Dispersal policies disrupt care & social support **Lack of material resources to navigate services**	**Women's lack of knowledge regarding their right to care** **Professionals' lack of knowledge regarding rights to care** **Professionals' failure to direct women to appropriate services** • GPs are the first and only contact with healthcare system **Women's lack of understanding of entitlements and rights**		

5.3.4.1 How did the included interventions attempt to address barriers to early initiation of antenatal care in UK BME women?

The elements of the 16 included interventions that were considered to address barriers affecting UK BME women are described below and summarized in Table 9.

Lack/Inaccessibility of local services

A number of the interventions used outreach workers – including lay advocates/ 'resource mothers', home visitors, case managers – to provide services in the woman's home or community. The outreach workers had different functions and roles in the various interventions: they sometimes provided pregnancy related support/care, but the programmes were not intended to provide or replace the need for comprehensive antenatal care itself. Thus it was still necessary for the woman to be referred for antenatal care and the women typically still needed to travel to a hospital/clinic in order to receive antenatal care. Some of the programmes provided "help with transportation" although it is not clear what form this took.

The outreach workers often had a 'case finding' role (see below) and helped women navigate their way into antenatal care either directly by making a referral or by advising and encouraging the woman. Although some of the programmes had an explicit aim to remove barriers to antenatal care and/or to improve access to antenatal care, most had much broader aims, for example to improve pregnancy outcomes and/or infant health. In line with these broader aims, the outreach workers in several of the schemes provided ongoing support to the women throughout pregnancy and following the birth.

Another approach adopted in one scheme involved a mobile women's health van, staffed by an obstetrician and nurse, which took services to disadvantaged populations (I3). The van provided some pregnancy related healthcare but in the majority of cases women were referred elsewhere for their antenatal care.

One scheme involved providing a local antenatal clinic in a disadvantaged area (I15).

Difficulties navigating services/ information has to be sought out not offered/women's lack of knowledge of services/women's lack of knowledge regarding purpose of care and choices available

The most common approach adopted to tackling the group of barriers arising from the complexity of services again involved outreach workers who often undertook proactive 'case finding' and sometimes were also directly involved in referring the woman to antenatal care. In some of the schemes, the outreach/programme worker's primary role was to provide 'informational support ' (e.g., advice, guidance, suggestions, or useful information); and in others (see Table 9), the outreach worker additionally had an explicit advocacy role and sometimes accompanied women to antenatal care appointments.

Table 9: Approaches used to tackle identified barriers by each of the included interventions

	Community/outreach services												Clinic-based			
	I1 Cramer	I2 Daaleman	I3 Edgerley	I4 Hunte	I5 Jewell	I6 Julnes	I7 Mackerras	I8 Mason	I9 Rogers	I10 Reichman	I11 Thompson	I12 Willis	I13 Martin	I14 Morris	I15 Mvula	I16 Newschaffer
Lack/Inaccessibility of local services																
Local services provided by outreach workers	+	+		+	+	+			+		+	+				
Mobile van taking services to community			+													
Help with transportation to antenatal care	+	-		+					+		+					
Neighbourhood (local) antenatal clinic															+	
Information																
Proactive 'case finding' followed by assistance entering/navigating health care system	+			+	?	+			+		+	+				?
Outreach /community-based staff providing information, education, etc	+	+		+	+	+	+	+	+		+	+				
- INCLUDING: Resource mothers or other outreach workers with an *explicit advocacy* role		+		+	+	?			+		+					
Staff provide direct assistance with referral for antenatal care	+	?	+	?	?	?			?		?	?				
Insensitive																
Outreach workers trained to provide emotional/social support		+		+	+	+			+		?					
Staff trained and/or expected to provide a sensitive, personalised service	?	?	?													
Services targeting needs of a specific group of women													+	+		
Values etc																
Outreach/programme workers recruited from 'target' population	+			+	+	+	+		?		+					
Staff trained in and/or recruited for cultural sensitivity	+	+	+	+	?		+			+	+	+				?
Education to help women understand the purpose of antenatal care and the need for medical care during pregnancy			+				+									
Language/communication																
Bilingual linkworkers								+								
Bilingual outreach workers and/or service staffed by bilingual healthcare staff		+	+								+					
Advocates attending healthcare consultations to help women overcome language and communication problems		+		+							?					
Assistance with form filling, etc for women with limited literacy				+							?					
Interpreter offered to women whose primary language is not English																+

KEY

+ = This element present in the intervention   ? = Information suggests that this element may be present   Blank = Element not present or insufficient information

System that is insensitive/indifferent or impersonal

Approaches to tackling barriers relating to the system being 'insensitive' or failing to treat women as individuals with complex needs were more difficult to assess. Available information for some of the outreach/community based programmes indicated that staff were trained and/or expected to provide social or emotional support (see, for example, I2, I4, I5, I6, I9 and possibly I12). Additionally, although it was not always explicitly stated, many of the outreach programmes (particularly those involving advocacy) almost certainly provided some form of individualized care or support.

Two of the interventions (I13, I14) involved providing antenatal clinics for a specific target group (teenagers in these examples). No further relevant information was provided about how these clinics specifically met the needs of teenagers, for example whether the care and services provided were customized in any way, but it is possible that being able to receive care with peers might make the service feel more personalized to the service users and the approach might be generalisable to other populations.

Values, beliefs and cultural preferences

Several of the outreach/community-based schemes addressed cultural barriers by recruiting staff from the target population, for example 'lay resource mothers' and the majority of the outreach/community-based programmes trained staff in and/or recruited them for 'cultural sensitivity/competence'.

Two of the interventions (one targeting Mexican-Americans and the other Australian Aboriginal women), explicitly provided education to help women understand the purpose of antenatal care and the need for medical care during pregnancy (I3, I7).

Language/communication barriers

Barriers relating to language and communication encompass both problems related to lack of English as a first language and to broader communication problems arising from cultural differences.

Three of the interventions explicitly employed bilingual staff (I2, I3, I8), who sometimes also had an advocacy role (I2, I11). In one of the interventions involving advocates indigenous to the community served (I4) the advocates attended antenatal appointments to help overcome communication problems and also helped with form filling, etc if a woman had limited literacy. In this example, the women who were being supported by the programme appeared to have been primarily English speaking Black Americans so it is assumed that the communication problems were not related to lack of English as a first language.

65

5.3.4.2 How did the interventions address barriers specifically affecting asylum seekers and refugees?

None of the interventions were explicitly aimed at women who were asylum seekers or refugees or likely to experience some of the specific problems faced by asylum seekers and refugees in the UK. Some of the 'case finding' and outreach services described above could potentially reach pregnant asylum seekers, but it is unclear to what extent such services would be able to address the multiple barriers faced by asylum seekers described in section 5.2 above.

5.3.5 What were the limitations and gaps in the barriers addressed by the included interventions

The following gaps and potential limitations were noted.

- **Outreach services in the woman's home or community may not address concerns about travelling elsewhere for antenatal care.**

- **Culturally sensitive outreach services may not change women's experience of antenatal care itself or broader experiences of the healthcare.** The majority of the interventions involved outreach services designed to help women enter antenatal care and often to provide support to the woman throughout pregnancy and beyond. With some notable exceptions (e.g. interventions where an advocate accompanied women to appointments where needed, or where there were broader initiatives to reduce racism in the healthcare system or to encourage more minority women to become healthcare workers), few of the interventions were designed to change women's experience of antenatal care itself.

- **Some cultural barriers found in UK BME women did not appear to be addressed, perhaps because they were not barriers in the populations targeted by the interventions reviewed.** It is unclear if the interventions could be adapted to address some specific cultural barriers that may less common in Black American women who were the clients for many of the included interventions. For example, the belief in some UK BME groups that pregnancy is natural and does not require medical intervention did not appear to be a widespread barrier in the US populations studied, with the exception of Mexican American women who were targeted in one study (I11). The belief that some medical interventions may be harmful (e.g. concern about the purpose and consequences of ultrasound screening) also did not appear to present a barrier in the populations studies; and there was little information to suggest that cultural /religious preferences for female healthcare staff were widespread in the populations studies.

- **Cultural differences may render some approaches ineffective in UK BME groups.** For example the 'case finding' approaches adopted in many of the US interventions would not necessarily be effective in women who view pregnancy as a private experience.

6 Discussion and conclusions

A thematic analysis of women's views identified four domains of factors influencing initiation of antenatal care: structural and material life circumstance; the care pathway for pregnant women; individual knowledge, culture motivation and beliefs; and family and social circumstances. Women most often describe a complicated system that is difficult to understand. Sometimes health professionals and advocates also appear to find the services available difficult to understand and fail to connect women to the services available and intended for them. From this starting point of a complicated system little understood by service users or service providers, further difficulties are superimposed for some women who have a limited command of English to understand any information that is given to navigate these services, and a lack of material resources to meet the commitment of regular appointments outside their immediate locale. When the purpose and benefit of antenatal care is not obvious, women are less likely to make the effort required to access the necessary information. Alternatively, while valuing such services, women remain unaware of the services intended for them without knowledge, sensitivity and guidance from health professionals or advocates. Moreover, disadvantaged women especially those with limited command of English, are less likely to have the assertiveness required to demand adequate services.

Systematic examination of the characteristics of a set of existing interventions targeting disadvantaged and vulnerable groups of women identified a number of approaches that 'meshed' with the identified barriers to antenatal care experienced by BME women in the UK.

The interventions, identified from a previous effectiveness review [1], used a variety of approaches to help or encourage pregnant women to enter antenatal care. Twelve of the interventions involved outreach or community-based services which sought out and provided women with information or support to help them access antenatal care; and four involved antenatal clinics with specific features that might increase early initiation of antenatal care. With the exception of a 'resource mother' programme where there is evidence that the intervention has been used to increase the early initiation of antenatal care in Black American teenagers, there was insufficient evidence to determine whether or not the interventions were effective; and for half of the interventions[74 81 92 94-96 100 102], the researchers who conducted the evaluation studies themselves acknowledged that the evidence did not show that the intervention had a significant effect on timing of initiation of antenatal care[1]. In some cases the lack of good evidence of effectiveness reflected inadequate evaluation methods rather than necessarily indicating that the interventions were ineffective.

Approaches that were considered potentially to address barriers relating to lack of knowledge and the complexity of the system included: proactive 'case finding'; use of professional and 'lay' outreach workers/advocates/case managers to help women navigate and use the healthcare system; and, in one of the interventions, a mobile 'health bus' was used to deliver services to women and to assist them in accessing standard antenatal care.

Cultural barriers were most commonly addressed by employing staff drawn from the target population, for example as advocates, and/or by recruiting or training staff in cultural sensitivity. Two interventions involved antenatal clinics targeting a specific group of women which may have enabled services to be customised to the specific needs of the target population as well as possibly

providing peer support, although the generalisability of this approach to other populations is uncertain.

Language and communication barriers were most commonly tackled by using bilingual staff and/or by advocates attending antenatal care appointments. One scheme also helped women with limited literacy with form filling and one intervention 'required' clinics to offer an interpreter to women whose primary language was not English.

The review did not identify any interventions that appeared to address the additional barriers faced specifically by asylum seekers and refugees in the UK.

6.1   Strengths and limitations of this study

The key strength of this study is its systematic approach to synthesizing the views of women living in the UK with the evidence about how to encourage early initiation of antenatal care. The findings relate specifically to women from Black and Minority ethnic groups in the UK, including those who are refugees and asylum seekers, and those whose first language is not English.

A strength of this review is that the views' studies were all conducted in the UK and were selected for the richness of data and the extent to which the study privileged the voices of women. By including all views we have been able to capture the views of women from Romany and Traveller communities as well as women who are new to this country. Few women explicitly talked about what enabled them or prevented them from seeking antenatal care so there is necessarily author interpretation of the voices of the women who took part in the studies.

A further strength is that we carried out exhaustive searches for studies of women's views, which included the 'grey literature', and were able to include eleven publications from peer-reviewed journals and ten other publications that were at least moderately useful in providing moderately reliable evidence about UK women's views on initiating antenatal care. For the UK this is an important advance on earlier syntheses which included studies from other countries [22 26 27] or limited studies to those included in peer reviewed journals [27].

Although systematic, this review was more iterative than most reviews. The focus of interest, namely women's views on initiation of care, was rarely explicitly mentioned in titles or abstracts because primary studies tend to have a broader focus on antenatal or maternity care generally. Therefore it was necessary to inspect the full text of all studies addressing women's views of antenatal care to ascertain how much relevant evidence was available before deciding the scope of the in-depth review. The final criteria for including evidence in the in-depth review were set in discussion with the steering group in light of the themes (but not the detailed findings), rather than before extracting data as usually happens. Having a steering group with members drawn from research, policy, practice and user communities was therefore particularly important for shedding light on this decision from all perspectives. Collating evidence scattered through studies, not merely collating study findings scattered through the literature, presented particular challenges for synthesis. Even after refining the scope to include only BME women, there were still 24 studies employing methods considered moderately reliable and only three of these were excluded from

further analysis because their findings were not considered even moderately useful for addressing the review question. A synthesis of evidence scattered across 21 studies resulted in a large set of themes. Barriers to initiation of care often related to several cross-cutting themes which presented a challenge for information management and clear reporting. The cross-study synthesis used information about existing interventions to identify approaches that have been used in a variety of settings with the aim of increasing early initiation of antenatal care in disadvantaged and vulnerable groups of women. A strength of this approach is that it identifies approaches that have been demonstrated to be feasible to implement in other settings. Additionally, the systematic effectiveness review used to identify the set of interventions explicitly sought to identify interventions that might be relevant in the context of the NHS and, for example, excluded interventions which primarily addressed barriers to antenatal care arising from lack of healthcare insurance. The approaches identified are therefore potentially relevant in the UK context. However, unlike the present review which included extensive searching of the grey literature, the previous effectiveness review only included evaluation studies published in scientific journals, thus potentially missing local evaluations/ reports of interventions in the NHS. A further substantial limitation is that, with the exception of one 'resource mothers' programme [73], these interventions have not been convincingly demonstrated to be effective in increasing the early initiation of antenatal care. Furthermore, most of the approaches that were identified that might address barriers in UK BME women were embedded in interventions with much broader aims and scope. Further work would be required to determine whether these interventions or 'approaches' could be embedded in services and programmes currently delivered the NHS. It is also unclear how well the interventions 'mesh' with existing NHS care pathways, particularly those involving GPs as gatekeepers, although women are increasingly accessing midwives directly rather than through their GP[109].

We initially planned to cover the views of disadvantaged and vulnerable women more generally but because of the volume of relevant studied identified in the initial systematic scoping review, we chose to focus on barriers affecting Black and Minority ethnic women in the UK. Thus, in addition to the material presented here, we have systematically identified research literature presenting the views of women from other disadvantaged groups in the UK which could usefully be synthesized using the approach adopted here. The populations covered in these studies include women of low socioeconomic status (six studies), young teenage women (18 studies), and women with other problems such as domestic violence (four studies), substance misuse (ten studies), female genital mutilation (two studies) or other problems such as disability, mental health problems or homelessness (11 studies).

6.2 Comparison with other reviews

There is considerable agreement between our findings and those of a recent review undertaken by the National Collaborating Centre for Women's and Children's Health (NCCWCH) to support the development of NICE clinical guidelines on service provision for pregnant women with complex social needs[22].

The NCCWCH review considered barriers to the take up of antenatal care by recent migrants, refugees and asylum seekers, but with a specific focus on barriers relating to service delivery and organisation. As in the present review, the NCCWCH identified barriers relating to: communication problems and lack of available interpreters; not understanding the healthcare system and how to access care; and healthcare professionals' lack of knowledge of cultural and religious difference. Barriers found in the NCCWCH review which did not emerge as barriers in the present study included racism and discrimination from healthcare staff and other staff. The reasons for this difference are uncertain but from the narrative summary provided in the NCCWCH review, it would appear that the theme of discrimination and racism largely emerged from women talking about their experiences of antenatal care, which may explain why this did not emerge as a barrier in our review. In our review, we took the decision not to **infer** cultural barriers from what women said about their antenatal care experience and instead focused on the themes that emerged from what women said about their experiences of initiating antenatal care and what they said about their care prior to booking (since this could directly affect booking). However, although we did not formally synthesis women's views about aspects of antenatal care after booking, the reviewers noted that women talked about issues such as the attitudes, and behaviour of health care staff; choice and empowerment; involvement in decision making; insensitivities to cultural preferences or cultural differences; insensitivities to women's lack of knowledge or understanding, and that come of these views were consistent with experiences of discrimination and racism. Inferring barriers to initiation of care from most of these accounts would have been an over interpretation of the evidence, although it might have been justified in two studies which contributed to the theme of *Fear of being labelled, judged or discriminated against*. One raised a particular concern for women with HIV:

> "[thinking that] *they will be charged for care and sent back to Africa because they are HIV positive*" (**V8** woman from Kenya)

Another study, reporting women talking later in pregnancy, revealed that many minority ethnic groups felt worried about being subjected to prejudice by health professionals, either because of their previous experiences or because of what they had heard from other women (**V5**). Given the importance of equity in health services, supporting data are listed in Appendix 8.

The evidence found in the NCCWCH review regarding the cost of transportation and GP registration refusal as barriers to take up of antenatal services was judged by the Guideline Development Group to be predominantly a problem in the USA as this issue was mainly found in the studies from there. However, our review of evidence from UK studies that were not included in the NCCWCH review, indicated that these problems are experienced by asylum seekers in the UK, i.e. these problems are not confined to the USA.

Our findings differ somewhat from two related and overlapping reviews of barriers to antenatal care for marginalized women in high-income countries[26 27], both of which emphasized psychosocial barriers and personal capacity. However, differences in methods and in the scope and coverage of these reviews may in part explain differences. Both Lavender and Downe used a meta-ethnographic approach[110] to identify barriers to antenatal care with a focus on 'what doesn't work, for who, in what circumstances'[27]. Both syntheses were based on a relatively small number of qualitative studies

(7^{26} and 8^{27} respectively[i]) of women who had failed to attend for antenatal care, booked late, or attended sporadically. Although both reviews initially aimed to study barriers in women in the UK, the authors found it necessary to broaden their inclusion criteria and, in both studies, all but one of the included studies had been conducted in North America. Both studies concluded that, in the groups studied (low-income and/or marginalized groups of women, including teenagers, women who were HIV positive and women who had experienced domestic violence), the failure to access antenatal care was influenced by the woman's acceptance/rejection of her pregnancy, by 'stigma, powerlessness [and] broken confidence' and lack of resources (money and time)[26][27], and by "lack of trust in care givers and care systems, and a lack of caring, respect and kindness in the care that they received"[26]. Because of the predominance of North American studies in these two reviews, it is unclear to what extent these findings are applicable to BME women in the UK. However, although the findings of both studies differ from ours, the findings are not fundamentally contradictory since Lavender and Downe focus on what "doesn't work' and the authors' conclusions are not at odds with ours:

> *'Multiagency initiatives to raise awareness of the signs and symptoms of early pregnancy and of the availability and benefits of early antenatal care in marginalized communities may increase initial uptake. A non-judgemental, contextually tailored antenatal service that pays attention to the specific circumstances of disadvantaged women may increase sustained access to antenatal care by tipping the balance in favour of attendance'[27]*

Quantitative surveys of maternity service users in general suggest that many of the barriers described here affect other groups of pregnant women and not just BME women. For example, lack of information about local services and lack of time with a midwife to talk through their concerns and choices both emerged as issues of concern to women in the 2008 Healthcare Commission review of maternity services [111].

Our findings relating to barriers experienced by asylum seekers and refugees are also congruent with the problems and barriers reported in a recent survey of midwives[112].

6.3   Outstanding questions: would the identified approaches work in the UK?

We have no way of knowing, without further evaluation, whether the possible interventions and approaches that we have identified would, in fact, be effective in UK BME groups. For example, some of the cultural beliefs and values that were found to be barriers to antenatal care in BME women in the UK may render some approaches that are effective in disadvantaged groups elsewhere ineffective in the BME groups represented in the UK. Additionally, our approach has led to an emphasis on interventions directly involving the delivery of face-to-face services to women and interventions required to bring about broader organizational changes – for example to make maternity services more culturally sensitive - may have been overlooked.

---

[i] Of which 7 were common to the two studies.

The literature suggests that some of the interventions and approaches identified in the cross-study synthesis are feasible to implement in the NHS and acceptable to BME women, while others may be less appropriate in the UK context.

A review by D'Souza and Garcia of interventions to improve perinatal outcomes for disadvantaged childbearing women found UK evaluations of seven 'promising generic strategies' to improve services to women from non-English speaking backgrounds and minority ethnic groups. Several of these interventions had some common ground with the approaches identified in this review: training of lay women and multilingual pharmacists to increase the uptake of health promotion, female GPs for Asian women, nurse-led women's group's to increase social support, listening and response service

The study of lay health advocates cited by D'Souza and Garcia showed, for example, that health advocates could be successfully used in non-English speaking pregnant women (primarily Asian and Turkish) attending a maternity unit in East London[113]; and the study suggested a possible beneficial effect on some pregnancy outcomes such as caesarean birth.

However, the authors of the East London study noted that employing members of the target population was not considered feasible in East London for several reasons which may apply to BME populations in other parts of the UK. There were too many different language groups and too few trained staff from those communities, and this was 'particularly true for Muslim communities, where religious constraints make it difficult for women to enter the caring professions'[113]. The use of bi-lingual staff would also potentially be inappropriate or less helpful in BME populations with multiple languages.

A useful review by Brach and Fraserirector[114] discussed other approaches to improve the cultural sensitivity of services, and discusses issues that may affect their implementation and effectiveness. They conclude that although these approaches – which include various ways of providing interpreters, training, coordination with traditional healers, use of community health workers, culturally competent health promotion, involving family and/or community members, immersion into another culture, and administrative and organizational accommodations - "should work" to reduce ethnic health disparities there is little evidence about which cultural competency techniques are effective and "less evidence on how to implement them properly"[114].

6.4 Implications for policy and practice
The findings suggest:

- There is a need to actively promote the existence, purpose and benefit of continuous antenatal care in a culturally appropriate way to the populations most at risk of late booking.

- The complexity of the system does not facilitate early presentation for continuous antenatal care, especially by women who are unfamiliar with such a system, women

who lack social networks that bring them into contact with other women who can share their own experiences and provide advice and support, and women with limited English. Healthcare staff in contact with pregnant BME women, particularly recent migrants and women who do not have English as their first language, need to be more aware of the need to proactively provide information to women in a way that women can understand.

- BME women who lack English as their first language or are recent migrants, may not fully or adequately understand information and advice provided during GP or other consultations and may be reluctant or unable to seek information that they need. The involvement of lay or professional advocates, or the adoption of an advocacy role by existing staff, might improve the quality and effectiveness of communication.

- There is a need for GP and maternity services to consider how best to accommodate BME women's cultural preferences for female healthcare staff and to be aware that women may lack the confidence and assertiveness to request such services if they are not actively offered.

- Women's experiences suggest a lack of cultural sensitivity/competence on the part of service providers.

- Women who are asylum seekers, and in some cases refugees, face additional problems arising from:

  o Dispersal policies which interfere with GP registration disrupt continuity of services and the willingness of some services to provide care when dispersal is pending. There is a need for women to be connected with the necessary health services in the area to which they are being dispersed. Women need to be allowed and indeed encouraged to register with a GP regardless of how long they may be in residence in the area to ensure the connections from one health service to another can tracked. Hand-held records and letters of referral from GPs were welcomed by women who were being dispersed in aiding some sort of continuity of care

  o Lack of cash to meet out of pocket expenses associated with travel to appointments and purchase of food to replace meals that they miss while attending appointments

  o Lack of knowledge of their rights to healthcare and women's fear that use of healthcare services may affect their claim for asylum

  o Lack of awareness of the healthcare rights and entitlements of asylum seekers and refugees on the part of NHS staff.

- Some of the barriers experienced by asylum seekers (and refugees) might be most appropriately addressed through national initiatives and/or policies relating to dispersal, financial support, etc.

6.5 Conclusions and recommendations for future research

In conclusion, our findings identify a range of barriers to early initiation of antenatal care experienced by BME women in the UK and suggest intervention approaches that might be used to address some of these. However, there is insufficient evidence that of the interventions or approaches discussed here are effective in increasing early initiation of antenatal care in BME women, or that they improve outcomes.

Given that many of the 'promising' approaches that we have identified would require further development and, in some cases, 'proof of concept' before they could be implemented and/or evaluated in the NHS, it might be useful to explore whether there are existing examples of these approaches in current use in the NHS. This approach is consistent with the recommendations of the NICE Guideline Development Group, which suggested "developing a clear and detailed map of existing services in the UK for pregnant women with complex social factors, and the effectiveness of these services…". It would be particularly useful to identify examples of maternity services that use an advocacy approach or have implemented programmes to improve the cultural competence of healthcare staff, including both primary care and antenatal care providers.

References

1. Oakley L, Gray R, Kurinczuk JJ, Brocklehurst P, Hollowell J. A systematic review of the effectiveness of interventions to increase the early initiation of antenatal care in socially disadvantaged and vulnerable women. Oxford: National Perinatal Epidemiology Unit; 2009. (http://www.npeu.ox.ac.uk/infant-mortality)
2. Confidential Enquiry into Maternal and Child Health (CEMACH). Saving Mothers' Lives: Reviewing maternal deaths to make motherhood safer - 2003-2005. London: CEMACH; 2007.
3. Confidential Enquiry into Maternal and Child Health (CEMACH). Perinatal Mortality 2007. London: CEMACH; 2009.
4. National Institute for Clinical Excellence (NICE). Antenatal care: routine care for the healthy pregnant woman (clinical guideline). London: NICE; 2008. (http://www.nice.org.uk/nicemedia/live/11947/40145/40145.pdf)
5. Redshaw M, Rowe RE, Hockley C, Brocklehurst P. Recorded delivery: a national survey of women's experience of maternity care 2006. Oxford: National Perinatal Epidemiolgy Unit; 2007. (https://www.npeu.ox.ac.uk/files/downloads/reports/Maternity-Survey-Report.pdf)
6. Redshaw M, Heikkila K. Delivered with care: a national survey of women's experience of maternity care 2010. Oxford: National Perinatal Epidemiology Unit; 2010. (https://www.npeu.ox.ac.uk/files/downloads/reports/Maternity-Survey-Report-2010.pdf)
7. Rowe RE, Garcia J. Social class, ethnicity and attendance for antenatal care in the United Kingdom: a systematic review. *J Public Health* 2003;25(2):113-19.
8. Kupek E, Petrou S, Vause S, Maresh M. Clinical, provider and sociodemographic predictors of late initiation of antenatal care in England and Wales. *BJOG: An International Journal of Obstetrics and Gynaecology* 2002;109(3):265-73.
9. Rowe RE, Magee H, Quigley MA, Heron P, Askham J, Brocklehurst P. Social and ethnic differences in attendance for antenatal care in England. *Public Health* 2008;122(12):1363-72.
10. Essex C, Counsell AM, Geddis DC. The Demographic Characteristics of Early and Late Attenders for Antenatal Care. *Australian and New Zealand Journal of Obstetrics and Gynaecology* 1992;32(4):306-08.
11. Delvaux T, Buekens P, Godin I, Boutsen M. Barriers to prenatal care in Europe. *American Journal of Preventive Medicine* 2001;21(1):52-59.
12. Trinh L, Rubin G. Late entry to antenatal care in New South Wales, Australia. *Reproductive Health* 2006;3(1):8.
13. Alderliesten ME, Vrijkotte TGM, van der Wal MF, Bonsel GJ. Late start of antenatal care among ethnic minorities in a large cohort of pregnant women. *BJOG: An International Journal of Obstetrics & Gynaecology* 2007;114(10):1232-39.
14. Raatikainen K, Heiskanen N, Heinonen S. Under-attending free antenatal care is associated with adverse pregnancy outcomes. *BMC Public Health* 2007;7(1):268.
15. Braveman P, Marchi K, Egerter S, Pearl M, Neuhaus J. Barriers to Timely Prenatal Care Among Women With Insurance: The Importance of Prepregnancy Factors. *Obstetrics & Gynecology* 2000;95(6, Part 1):874-80.
16. Lalchandani S, MacQuillan K, Sheil O. Obstetric profiles and pregnancy outcomes of immigrant women with refugee status. *Irish Medical Journal* 2001;94(3):79-80.
17. NHS London. Data produced for annual report to the Nursing & Midwifery Council (NMC) for 2009/10. (Accessed July 2012, at http://www.london.nhs.uk/your-nhs-in-london/publishing-nhs-data/maternity-data.)
18. Office for National Statistics. Birth Summary Tables, England and Wales, 2011. 2012. ((Accessed August 2012, at http://www.ons.gov.uk/ons/rel/vsob1/birth-summary-tables--england-and-wales/2011--provisional-/index.html.))

19. Centre for Maternal and Child Enquiries (CMACE). Saving Mothers' Lives: Reviewing maternal deaths to make motherhood safer: 2006–2008 (The Eighth Report of the Confidential Enquiries into Maternal Deaths in the United Kingdom). *BJOG: An International Journal of Obstetrics & Gynaecology* 2011;118(Supplement 1):1-203.

20. Centre for Maternal and Child Enquiries (CMACE). Perinatal Mortality 2009: United Kingdon. London: CMACE; 2011. (http://www.hqip.org.uk/assets/NCAPOP-Library/CMACE-Reports/35.-March-2011-Perinatal-Mortality-2009.pdf)

21. HM Government. PSA Delivery Agreement 19: Ensure better care for all. London: HMSO; 2007.

22. National Collaborating Centre for Women's and Children's Health. Pregnancy and complex social factors: A model for service provision for pregnant women with complex social factors. London: Royal College of Obstetricians and Gynaecologists; 2010. (http://www.nice.org.uk/nicemedia/live/13167/50861/50861.pdf)

23. Department of Health. Maternity Standard, National Service Framework for Children, Young People and Maternity Services. London: DH; 2004. (http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4090523.pdf)

24. Department of Health. Implementation Plan for Reducing Health Inequalities in Infant Mortality: A Good Practice Guide. London: DH; 2007. (http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_081336.pdf)

25. Department of Health. Equity and excellence: Liberating the NHS. London: HMSO; 2010. (http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@ps/documents/digitalasset/dh_117794.pdf)

26. Lavender T, Downe S, Finnlayson K, Walsh D. Access to antenatal care: a systematic review. Preston, Lancashire: University of Central Lancashire; 2007.

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

28. Fiscella K. Does prenatal care improve birth outcomes? A critical review. *Obstetrics & Gynecology* 1995;85(3):468-79.

29. Kavanagh J, Oliver S, Lorenc T. Reflections on developing and using PROGRESS-Plus. *Equity Update* 2008;2(1).

30. Evans T, Brown H. Road traffic crashes: operationalizing equity in the context of health sector reform. *Injury Control and Safety Promotion* 2003;10(1-2):11-12.

31. Rees R, Oliver K, Woodman J, Thomas J. Children's views about obesity, body size, shape and weight: a systematic review. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London; 2009. (http://eppi.ioe.ac.uk/cms/LinkClick.aspx?fileticket=FEJt5hyrzgM%3d&tabid=2463&mid=4608)

32. Harden A. The quality of qualitative evidence: a review of assessment tools. *Seventh Annual International Campbell Colloquium*. London, England, 2007 (14-16 May).

33. Thomas J, Harden A. Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Medical Research Methodology* 2008;8(1):45.

34. Thomas J, Brunton J, Graziosi S. EPPI-Reviewer 4.0: software for research synthesis. EPPI-Centre Software. London: Social Science Research Unit, Institute of Education, University of London; 2010.

35. Oliver S, Harden A, Rees R, Shepherd J, Brunton G, Garcia J, et al. An Emerging Framework for Including Different Types of Evidence in Systematic Reviews for Public Policy. *Evaluation* 2005;11(4):428-46.

36. Rees R, Kavanagh J, Harden A, Brunton G, Oliver S, Oakley A. Young people and physical activity: a systematic review matching their views to effective interventions. *Health Education Research* 2006;21:806-25.

37. Dartnall L, Ganguly N, Batterham J. Access to Maternity Services Research Report. London: COI & Department of Health; 2005. (http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4124244.pdf)

38. Ali N, Burchett H, Sivagnanam R. Experiences of maternity services: Muslim women's perspectives. London: The Maternity Alliance; 2004. (http://www.maternityaction.org.uk/sitebuildercontent/sitebuilderfiles/muslimwomensexperiencesofmaternityservices.pdf)

39. Bawadi H. Migrant Arab Muslim Women's experiences of Childbirth in the UK *(PhD thesis)*. De Montfort University, , 2009.

40. Briscoe L, Lavender T. Exploring maternity care for asylum seekers and refugees. *British Journal of Midwifery* 2009;17(1):17-24.

41. Chan C. A study of health services for the Chinese minority in Manchester. *British Journal of Community Nursing* 2000;5(3):140-7.

42. Davies MM, Bath PA. The maternity information concerns of Somali women in the United Kingdom. *Journal of Advanced Nursing* 2001;36(2):237-45.

43. Gaudion A, Allotey P. Maternity Care for asylum seekers and refugees in Hillingdon: A health needs assessment. London: Centre for Public Health, Brunel University; 2008. (http://www.thepolyannaproject.org.uk/documents/Needs_assessment_in_Hillingdon.pdf)

44. Gaudion A. The Reaching Out Project: A report on the development of the Maternity Access and Advocacy Pack. London: The Maternity Alliance/Medact; 2007. (http://www.medact.org/content/maap/finalreportdeveloppilotmaap.pdf)

45. Gaudion A. The Reaching Out Project: Report on preliminary consultations May - July 2005. London: The Maternity Alliance/Medact; 2006. (http://www.medact.org/content/reaching_out/Report%20on%20preliminary%20consultations.doc)

46. Harper-Bulman K, McCourt C. Somali refugee women's experiences of maternity care in west London: A case study. *Critical Public Health* 2002;12(4):365-80.

47. Hennings J. The maternity care experiences of Bangladeshi women: a users' perspective. *Applied Community Studies* 1995;2(3):18-30.

48. Jayaweera H, D'Souza L, Garcia J. A local study of childbearing Bangladeshi women in the UK. *Midwifery* 2005;21(1):84-95.

49. Katbamna S. Experiences of Bangladeshi and Gujarati women in childbirth *(PhD thesis)*. Cranfield Institute of Technology, Department of Social Policy, 1993.

50. McCourt C, Pearce A. Does continuity of carer matter to women from minority ethnic groups? *Midwifery* 2000;16(2):145-54.

51. McLeish J. Mothers in exile: maternity experiences of asylum seekers in England. London: Maternity Alliance; 2002. (http://www.maternityaction.org.uk/sitebuildercontent/sitebuilderfiles/mothersinexile.pdf)

52. Nabb J. Pregnant asylum-seekers: perceptions of maternity service provision. *Evidence Based Midwifery* 2006;4(3):89-95.

53. Puthussery S, Twamley K, Macfarlane A, Harding S, Baron M. "You need that loving tender care': maternity care experiences and expectations of ethnic minority women born in the United Kingdom. *J Health Serv Res Policy* 2010;15(3):156-62

54. Raine R, Cartwright M, Richens Y, Mahamed Z, Smith D. A Qualitative Study of Women's Experiences of Communication in Antenatal Care: Identifying Areas for Action. *Maternal and Child Health Journal* 2010;14(4):590-99.

55. Richens Y. Exploring the experiences of women of Pakistani origin of UK maternity services. London: Department of Health; 2003.

56. Straus L, McEwen A, Hussein FM. Somali women's experience of childbirth in the UK: perspectives from Somali health workers. *Midwifery* 2009;25(2):181-6.

57. Waugh M. The Mothers in Exile Project: Women asylum seekers' and refugees' experiences of pregnancy and childbirth in Leeds. Leeds: Womens Health Matters; 2010. (http://www.womenshealthmatters.org.uk/downloads/The-Mothers-in-Exile-Full-Report-2010.doc)

58. Higginbottom G, Owen JM, Mathers N, Marsh P, Kirkham M. Early parenthood among young people of minority ethnic origin in England. *British Journal of Midwifery* 2006;14(3):142-44, 46.

59. Jessa F, Hampshire AJ. Use of folic acid by pregnant British Pakistani women: a qualitative pilot study. *Health Education Journal* 1999;58(2):139-45.

60. Akuffo M. Early Access to Antenatal Care Booking in Tower Hamlets. London: Tower Hamlets PCT; 2007. (http://www.towerhamlets.nhs.uk/publications/corporate-publications/?entryid4=23675&q=0%C2%ACearly%C2%AC)

61. Baxter C. The communication needs of black and ethnic minority pregnant women in Salford: a report on a needs assessment exercise. Salford: Salford Health Authority; 1993.

62. Dosnajh JS, Ghuman PAS. Child-rearing practices of two generations of Punjabi parents. *Children & Society* 1997;11(1):29-43.

63. Miller T. Shifting Boundaries: Exploring the Influence of Cultural Traditions and Religious Beliefs of Bangladeshi Women on Antenatal Interactions. *Women's Studies International Forum* 1995;18(3):299-309.

64. Oxford City Council. Black and Asian women's maternity needs: a preliminary study. Oxford: Oxford City Council; 1990.

65. Pershad P, Tyrrell H. Access to antenatal and postnatal services for Asian women living in East Pollokshields, Glasgow. Glasgow: Save the Children; 1995.

66. Woollett A, Dosanjh N, Nicolson P, Marshall H, Djhanbakhch O, Hadlow J. The ideas and experiences of pregnancy and childbirth of Asian and non-Asian women in east London. *The British Journal of Medical Psychology* 1995;68 (Pt 1):65-84.

67. Woollett A, Dosanjh-Matwala N. Pregnancy and antenatal care: the attitudes and experiences of Asian women. *Child: care, health and development* 1990;16(1):63-78.

68. Bowes AM, Domokos TM. South Asian Women and Health Services: A Study in Glasgow. *Journal of Ethnic and Migration Studies* 1993;19(4):611-26.

69. Davies MM, Papadopoulos I. Notions of motherhood and the maternity needs of Arab Muslim women. In: Papadopoulos I, editor. *Transcultural Health and Social Care*. Edinburgh: Elsevier, 2006.

70. Gaudion A, Godfrey C, Homeyard C, Cutts H. The Barking and Dagenham Women's Wheel Report. London: The Pollyanna Project; 2008. (http://www.thepolyannaproject.org.uk/resources/barking_and_dagenham_report.pdf)

71. Ipsos Mori. Access to Antenatal Care Amongst Vulnerable Pregnant Women: An In-Depth Analysis From the Perspective of Women and Staff from the NHS and Other Bodies. Ipos Mori Social Research Institute; 2008.

72. Narang I, Murphy S. Assessment of the antenatal care for Asian women. *British Journal of Midwifery* 1994;2(4):169-73.

73. Rogers MM, Peoples-Sheps MD, Suchindran C. Impact of a social support program on teenage prenatal care use and pregnancy outcomes. *Journal of Adolescent Health* 1996;19(2):132-40.

74. Cramer ME, Chen L-W, Roberts S, Clute D. Evaluating the social and economic impact of community-based prenatal care. *Public Health Nursing* 2007;24(4):329-36.

75. Omaha Healthy Start. Our Services. (Accessed December 2011, at http://www.omahahealthystart.org/?page_id=180.)
76. Daaleman TP. The effect of a paraprofessional home visiting program on utilization of prenatal care. *Kansas Medicine* 1997;98(2):6-9.
77. Daaleman TP. *(Personal Communication)*. Received October 2010.
78. Shepherd MD, Starrett BE. Kansas Department of Health and Environment Healthy Start Home Visitor Program Evaluation. Topeka, KS: Kansas Health Institute; 2002. (http://media.khi.org/news/documents/2009/10/29/kdhe_healthy_start_home_visitor_program_evaluation.pdf)
79. Edgerley L, El-Sayed Y, Druzin M, Kiernan M, Daniels K. Use of a Community Mobile Health Van to Increase Early Access to Prenatal Care. *Maternal and Child Health Journal* 2007;11(3):235-39.
80. Lucile Packard Foundation for Children's Health. The Mommy Van: a Mobile Clinic Increasing Women's Access to Health Care (Proposal to The California Wellness Foundation). Palo Alto, CA: Lucile Packard Foundation for Children's Health; 2002.
81. Hunte HER, Turner TM, Pollack HA, Lewis EY. A birth records analysis of the maternal infant health advocate service program: A paraprofessional intervention aimed at addressing infant mortality in African Americans. *Ethnicity and Disease* 2004;14(3 SUPPL. 1):S1-102-S1-07.
82. Maternal and Infant Health Advocacy Services. The REACH US MIHAS program. (Accessed December 2011, at http://www.yc4w.org/mihas.html.)
83. Pestronk RM, Franks ML, REACH Team, Healthy Start Team, PRIDE Team. A partnership to reduce African American infant mortality in Genesee County, Michigan. *Public Health Reports* 2003;118(4):324-35.
84. Jewell NA, Russell KM. Increasing access to prenatal care: an evaluation of minority health coalitions' early pregnancy project. *Journal of Community Health Nursing* 2000;17(2):93-105.
85. Indiana Minority Health Coalition. Addressing Indiana's Health Disparities: The Framework, Foundation and Integral Role of the Indiana Minority Health Coalition. Indiana Minority Health Coalition; 2011. (http://www.imhc.org/downloads/2011health_disparities_executive_summary.pdf)
86. Julnes G, Konefal M, Pindur W, Kim P. Community-based perinatal care for disadvantaged adolescents: evaluation of The Resource Mothers Program. *Journal of Community Health* 1994;19(1):41-53.
87. Virginia Department of Health. Resource Mothers Program. (Accessed December 2011, at http://www.vahealth.org/resourcemothers/.)
88. Mackerras D. Birthweight changes in the pilot phase of the Strong Women Strong Babies Strong Culture Program in the Northern Territory. *Australian & New Zealand Journal of Public Health* 2001;25(1):34-40.
89. Mackerras D. Evaluation of the Strong Women, Strong Babies, Strong Culture Program: Results for the period 1990–1996 in the three pilot communities. Issue No. 2/98. Darwin, Northern Territory; 1998.
90. Department of Health and Ageing. National Aboriginal and Torres Strait Islander Child and Maternal Health Exemplar Site Initiative: Site Reports 2005. Department of Health and Ageing, Australian Government; 2005. (http://www.health.gov.au/internet/h4l/publishing.nsf/Content/respack-exemplarsite)
91. Tursan d'Espaignet E, Measey ML, Carnegie MA, Mackerras D. Monitoring the 'Strong Women, Strong Babies, Strong Culture Program': The first eight years. *Journal of Paediatrics and Child Health* 2003;39(9):668-72.
92. Mason ES. The Asian Mother and Baby Campaign (the Leicestershire experience). *Journal of the Royal Society of Health* 1990;110(1):1-4.

93. Rogers MM, Peoples-Sheps MD, Sorenson JR. Translating research into MCH service: comparison of a pilot project and a large-scale resource mothers program. *Public Health Rep* 1995;110(5):563–69.

94. Reichman NE, Florio MJ. The effects of enriched prenatal care services on Medicaid birth outcomes in New Jersey. *Journal of Health Economics* 1996;15(4):455-76.

95. Thompson M, Curry MA, Burton D. The effects of nursing case management on the utilization of prenatal care by Mexican-Americans in rural Oregon. *Public Health Nursing* 1998;15(2):82-90.

96. Willis WO, Eder CH, Lindsay SP, Chavez G, Shelton ST. Lower Rates of Low Birthweight and Preterm Births in the California Black Infant Health Programs. *Journal of the National Medical Association* 2004;96(3):315-24.

97. Willis WO. California Black Infant Health Evaluation Report. *(Personal communication)*; Received November 2010.

98. Willis WO. California Black Infant Health Program (PowerPoint Presentation). San Diego State University: *(Personal communication)* Received November 2010.

99. California Department of Public Health. Black Infant Health Program. (Accessed December 2011, at http://www.cdph.ca.gov/programs/bih/Pages/default.aspx.)

100. Martin RD, MacDowell NM, Macmann JM. Effectiveness of a teen pregnancy clinic in a managed care setting. *Managed Care Quarterly* 1997;5(3):20-7.

101. Morris DL, Berenson AB, Lawson J, Wiemann CM. Comparison of adolescent pregnancy outcomes by prenatal care source. *Journal of Reproductive Medicine for the Obstetrician and Gynecologist* 1993;38(5):375-80.

102. Mvula MM, Miller Jr JM. A comparative evaluation of collaborative prenatal care. *Obstetrics and Gynecology* 1998;91(2):169-73.

103. Boudreaux M, Miller JJ, Wightkin J, Martin S, Mather F. Collaborative care for obstetric patients at low and high risk: an evolving model. *Journal of Perinatology* 1997;17 (1)(1):33-36.

104. Newschaffer CJ, Cocroft J, Hauck WW, Fanning T, Turner BJ. Improved birth outcomes associated with enhanced Medicaid prenatal care in drug-using women infected with the human immunodeficiency virus. *Obstetrics and Gynecology* 1998;91(6):885-91.

105. New York State Department of Health. Medicaid Prenatal Care Standards. (Accessed December 2011, at http://www.health.ny.gov/health_care/medicaid/standards/prenatal_care/.)

106. Turner BJ, Newschaffer CJ, Cocroft J, Fanning TR, Marcus S, Hauck WW. Improved birth outcomes among HIV-infected women with enhanced medicaid prenatal care. *American Journal of Public Health* 2000;90(1):85-91.

107. Joyce T. Impact of augmented prenatal care on birth outcomes of Medicaid recipients in New York City. *Journal of Health Economics* 1999;18(1):31-67.

108. Daniels K. *(Personal Communication)*. Received October 2010.

109. Care Quality Commission. Women's experiences of maternity care in England. Key findings from the 2010 NHS trust survey. (http://www.cqc.org.uk/sites/default/files/media/documents/20101201_mat10_briefing_final_for_publication_201101072550.pdf)

110. Noblit GW, Hare RD. *Meta-ethnography: synthesizing qualitative studies*. Newbury Park, CA: Sage, 19988.

111. Healthcare Commission. Towards better births. A review of maternity services in England: Commission for Healthcare Audit and Inspection, 2008.

112. Bryant HB, on behalf of Maternity Action. Improving care for refugees and asylum seekers: the experiences of midwives. London: Maternity Action; 2011. (http://www.maternityaction.org.uk/sitebuildercontent/sitebuilderfiles/experiencesofmidwivesreport2011.pdf)

113. Parsons L, Day S. Improving obstetric outcomes in ethnic minorities: an evaluation of health advocacy in Hackney. *Journal of Public Health* 1992;14(2):183-91.
114. Brach C, Fraserirector I. Can Cultural Competency Reduce Racial and Ethnic Health Disparities? a Review and Conceptual Model. *Medical Care Research and Review* 2000;57(4 suppl):181-217.
115. Davies MM, Bath PA. Interpersonal sources of health and maternity information for Somali women living in the UK: Information seeking and evaluation. *Journal of Documentation* 2002;58(3):302-18.
116. Gaudion A, Homeyard C. No voice, no choice: barriers to the exercise of choice by 'marginalised' women (part two). *Midwives* 2008;11(6).
117. Katbamna S. *''Race' and childbirth*. Buckingham: Open University Press, 2000.
118. McLeish J. Maternity experiences of asylum seekers in England. *British Journal of Midwifery* 2005;13(12):782-5.
119. City University. Born in the UK. Investigating maternity and postnatal care needs amongst UK-born ethnic minorities: perceptions from mothers and health care providers. 2007. (http://www.maternityaction.org.uk/sitebuildercontent/sitebuilderfiles/bornintheuksummary.pdf)
120. Twamley K, Puthussery S, Macfarlane A, Harding S, Ahmed S, Mirsky J. Recruiting UK-Born women from ethnic minority groups for qualitative health research – lessons learned from a study on maternity care. *Research Policy and Planning* 2009;27(1).

Appendix 1. PubMed search strategy

#6

Search #1 and #2 and #3 and #4 and #5 13:09:25   2362

#5

Search ("1990"[Publication Date] : "3000"[Publication Date]) AND English[Language]   13:08:48
        9757239

#4

Search Northern Ireland[PL] OR United Kingdom[PL] OR Britain[PL] OR Scotland[PL] OR Wales[PL] OR England[PL] OR Great Britain[MeSH Terms] OR (Europe[MeSH Terms:noexp]) OR Northern Ireland[MeSH Terms] OR UK OR Scotland OR England OR Wales OR "Northern Ireland" OR Europe OR British OR Scottish OR Welsh OR International OR U.K. OR "United Kingdom" OR European OR Britain OR "Channel Isles" OR "Channel Islands" OR English[tiab] OR Irish OR "EU Member"[tiab] OR "district council" OR "local council" OR "local authorities" OR "NHS" OR "primary care trust" OR "borough council" OR "county council" OR "local authority" OR "district councils" OR "local councils" OR "primary care trusts" OR "borough councils" OR "county councils" OR Eur OR "Social Care Trust" OR "mental health trust" OR "strategic health authority"   13:08:20   4230854

#3

Search "ethnopsychology"[mesh terms] OR "focus groups"[mesh terms] OR "interviews as topic"[mesh terms] OR "empirical research"[mesh terms] OR "emotions"[mesh terms] OR "awareness"[mesh terms] OR "comprehension"[mesh terms] OR "health knowledge, attitudes, practice"[mesh terms] OR "attitude"[mesh terms:noexp] OR "attitude to health"[mesh terms:noexp] OR "focus groups"[mesh terms] OR "qualitative research"[mesh terms] OR ethnologic[tiab] OR ethnological[tiab] OR ethnologically[tiab] OR ethnologist[tiab] OR ethnologists[tiab] OR ethnology[tw] OR stories[tiab] OR content analysis[tiab] OR ethnographic[tiab] OR audiorecording[tw] OR observational methods[tiab] OR participant observation[tiab] OR field notes[tiab] OR experiences[tiab] OR experience[tiab] OR narratives[tiab] OR narrative[tiab] OR discourse[tiab] OR inter-personal[tiab] OR individual-level[tiab] OR repertory grid[tiab] OR acceptability[tiab] OR worry[tiab] OR worries[tiab] OR feelings[tiab] OR dissatisfied[tiab] OR satisfied[tiab] OR over-concern[tiab] OR concerns[tiab] OR concern[tiab] OR prejudice[tiab] OR prejudices[tiab] OR process evaluations[tiab] OR process evaluation[tiab] OR emotions[tiab] OR ethnopsychology[tiab] OR focus groups[tiab] OR behavioral research[tiab] OR behavioural research[tiab] OR narration[tiab] OR satisfaction[tiab] OR dissatisfaction[tiab] OR meanings[tiab] OR meaning[tiab] OR perspectives[tiab] OR perspective[tiab] OR ideas[tiab] OR idea[tiab] OR concepts[tiab] OR concept[tiab] OR beliefs[tiab] OR belief[tiab] OR attitudes[tiab] OR attitude[tiab] OR perceived[tiab] OR perceives[tiab] OR perceive[tiab] OR perceptions[tiab] OR perception[tiab] OR views[tiab] OR view[tiab] OR qualitative[tiab] OR interviewed[tiab] OR interviewing[tiab] OR interviewer[tiab] OR interviews[tiab] OR interview[tiab] OR comprehension[tiab] OR attitudinal[tiab]

OR outlook[tiab] OR in depth[tiab] OR case studies[tiab] OR case study[tiab] OR opinions[tiab] OR opinion[tiab] OR expectations[tiab] OR expectation[tiab] OR thoughts[tiab] OR narratives[tiab] OR standpoint[tiab] OR standpoints[tiab] OR viewpoints[tiab] OR viewpoint[tiab] OR audio record[tiab] OR audio recorded[tiab] OR audio recorder[tiab] OR audio recording[tiab] OR audio recordings[tiab] OR audio records[tiab] OR thematic analysis[tiab] OR phenomenol[tiab] OR phenomenolgical[tiab] OR phenomenologial[tiab] OR phenomenologic[tiab] OR phenomenologic/hermeneutic[tiab] OR phenomenological[tiab] OR phenomenological/hermeneutic[tiab] OR phenomenological/hermeneutical[tiab] OR phenomenological/mechanistic[tiab] OR phenomenological/psychoanalytic[tiab] OR phenomenological/spiritual[tiab] OR phenomenological'[tiab] OR phenomenological framework[tiab] OR phenomenologically[tiab] OR phenomenologico[tiab] OR phenomenologies[tiab] OR phenomenologigal[tiab] OR phenomenologischer[tiab] OR phenomenologist[tiab] OR phenomenologists[tiab] OR phenomenologists'[tiab] OR phenomenology[tiab] OR phenomenology/epidemiology[tiab] OR phenomenology/hermeneutics[tiab] OR phenomenology'[tiab] OR phenomenology's[tiab] OR grounded theory[tiab] OR grounded studies[tiab] OR grounded research[tiab] OR purposive sampling[tiab] OR constant comparative[tiab] OR constant comparison[tiab] OR purposive sample[tiab] OR field study[tiab] OR field studies[tiab] OR field research[tiab] OR biographical method[tiab] OR (theoretical sample[tiab] OR theoretical sampling[tiab]) OR open-ended[tiab] OR "open ended"[tiab] OR "life world"[tiab] OR life-world[tiab] OR conversation analysis[tiab] OR theoretical saturation[tiab] OR "thematic analyses"[tiab] OR anxiety[tiab] OR anxieties[tiab] OR anxious[tiab] OR questionnaire[tiab] OR questionnaires[tiab] OR unsatisfactory[tiab] OR unsatisfied[tiab] OR issues[tiab] OR preference[tiab] OR preferences[tiab] OR survey[tiab] OR surveys[tiab] OR "personal satisfaction"[MeSH Terms] OR "questionnaires"[MeSH Terms] OR "patient acceptance of health care"[MeSH Terms:noexp] OR "patient participation"[MeSH Terms] OR "patient preference"[MeSH Terms] OR "needs assessment"[MeSH Terms]   13:07:36
        2235336

#2

Search ((antenatal care[tiab] OR antenatal clinic*[tiab] OR antenatal health service*[tiab] OR antenatal healthcare[tiab] OR antenatal program*[tiab] OR antenatal programme*[tiab] OR antenatal service*[tiab]) OR (maternity care[tiab] OR maternity clinic*[tiab] OR maternity health service*[tiab] OR maternity healthcare[tiab] OR maternity program*[tiab] OR maternity programme*[tiab] OR maternity service*[tiab]) OR (obstetric care[tiab] OR obstetric clinic*[tiab] OR obstetric health service*[tiab] OR obstetric healthcare[tiab] OR obstetric program*[tiab] OR obstetric programme*[tiab] OR obstetric service*[tiab]) OR (perinatal care[tiab] OR perinatal clinic*[tiab] OR perinatal health service*[tiab] OR perinatal healthcare[tiab] OR perinatal program*[tiab] OR perinatal programme*[tiab] OR perinatal service*[tiab]) OR (prenatal care[tiab] OR prenatal clinic*[tiab] OR prenatal health service*[tiab] OR prenatal healthcare[tiab] OR prenatal program*[tiab] OR prenatal programme*[tiab] OR prenatal service*[tiab]) OR (maternal healthcare[tiab] OR maternal health service[tiab])) OR (prenatal care[mh] OR perinatal care[mh] OR obstetric nursing[mh]) OR (((midwifery[mh] OR nurse midwives[mh] OR maternal child nursing[mh] OR maternal health services[mh]) OR (midwife[tiab] OR midwifery[tiab] OR midwives[tiab] OR maternal health services[tiab])) AND and AND (pregnancy[tiab] OR childbirth[tiab] OR child-

birth[tiab] OR childbearing[tiab] OR birth[tiab] OR antenatal[tiab] OR prenatal[tiab] OR perinatal[tiab]))	13:07:02	32281

#1

("battered women"[MeSH Terms] OR teenage parent[tiab] OR teenage parents[tiab] OR young mothers[tiab] OR young mums[tiab]) OR ("women"[MeSH Terms:noexp] OR "female"[MeSH Terms:noexp] OR "mothers"[MeSH Terms] OR mothers[tiab] OR women[tiab] OR mums[tiab]) AND ("socioeconomic factors"[MeSH Terms] OR "social class"[MeSH Terms] OR Equity[tiab] OR inequaliti[tiab] OR inequalities[tiab] OR inequality[tiab] OR equalities[tiab] OR equality[tiab] OR unequal[tiab] OR unequally[tiab] OR inequitable[tiab] OR inequitably[tiab] OR inequities[tiab] OR inequitous[tiab] OR inequity[tiab] OR disparities[tiab] OR disparity[tiab] OR gap[tiab] OR gaps[tiab] OR gradient[tiab] OR gradients[tiab] OR disadvantage[tiab] OR disadvantages[tiab] OR disadvantaged[tiab] OR socioeconomic[tiab] OR socioeconomically[tiab] OR socioeconomics[tiab] OR "health status indicators"[MeSH Terms] OR "health status disparities"[MeSH Terms] OR "healthcare disparities"[MeSH Terms] OR "poverty"[MeSH Terms] OR "medical indigency"[MeSH Terms] OR "vulnerable populations"[MeSH Terms] OR "minority health"[MeSH Terms] OR "minority groups"[MeSH Terms] OR "population groups"[MeSH Terms] OR "ethnic groups"[MeSH Terms] OR "health services, indigenous"[MeSH Terms] OR multiethnic[tiab] OR multiethnical[tiab] OR multiethnically[tiab] OR multiethnicity[tiab] OR multi ethnic[tiab] OR ethnical[tiab] OR multi ethnicity[tiab] OR multi ethnics[tiab] OR multiracial[tiab] OR multi racial[tiab] OR "prisoners"[MeSH Terms] OR prisoners[tiab] OR prison*[tiab] OR jail*[tiab] OR remand*[tiab] OR imprison*[tiab] OR offend*[tiab] OR criminal*[tiab] OR detention*[tiab] OR convict*[tiab]) OR "refugees"[MeSH Terms] OR "Emigrants and Immigrants"[mh] OR "Transients and Migrants"[mh] OR immigrant[tiab] OR immigrants[tiab] OR refugee[tiab] OR refugees[tiab] OR migrant[tiab] OR migrants[tiab] OR asylum seeker[tiab] OR asylum seekers[tiab] OR "gypsies"[MeSH Terms] OR traveller[tiab] OR travellers[tiab] OR gypsy[tiab] OR gypsies[tiab] OR gipsy[tiab] OR gipsies[tiab] OR roma[tiab] OR romany[tiab] OR romanies[tiab] OR "homeless youth"[MeSH Terms] OR "homeless persons"[MeSH Terms] OR homeless[tiab] OR homelessness[tiab] OR "spouse abuse"[MeSH Terms] OR "domestic violence"[MeSH Terms] OR ((abuse[tiab] OR abused[tiab] OR abuses[tiab] OR abusive[tiab] OR violence[tiab] OR violent[tiab]) AND (partner[tiab] OR partners OR wife[tiab] OR wives[tiab] OR spouse[tiab] OR spouses[tiab] OR domestic[tiab] OR intimate[tiab] OR relationship[tiab] OR relationships[tiab] OR home[tiab] OR family[tiab] OR families[tiab])) OR disadvantage[tiab] OR tiab OR disadvantaging[tiab] OR disadvantaged OR deprived area[tiab] OR deprived areas[tiab] OR innercity[tiab] OR inner city[tiab] OR innercities[tiab] OR inner cities[tiab] OR Mental Disorders[mh] OR eating disorders[mh] OR mood disorders[mh] OR "schizophrenia and disorders with psychotic features"[mh] OR Learning Disorders[mh] OR Mental Deficiency[mh] OR Prostitution[mh] OR sex worker[tiab] OR sex workers[tiab] OR prostitute[tiab] OR prostitutes[tiab] OR Adolescent Health Services[mh] OR Adolescent[mh] OR Pregnancy in Adolescence[mh] OR teen[tiab] OR teenage[tiab] OR teens[tiab] OR teenagers[tiab] OR teenaged[tiab] OR youth[tiab] OR youths[tiab] OR young people[tiab] OR adolescent[tiab] OR adolescents[tiab] OR adolescence[tiab] OR juvenile[tiab] OR juveniles[tiab] OR social exclusion[tiab] OR socially excluded[tiab] OR social inclusion[tiab] OR social alienation[tiab] OR socially alienated[tiab] OR unemployed[tiab] OR unwaged[tiab] OR socially isolated[tiab] OR social isolation[tiab] OR intercultural communication[tiab] OR cultural groups[tiab] OR non-English[tiab] OR HIV Infections[mh] OR HIV[mh] OR HIV[tiab] OR HIV-pos*[tiab] OR HIV-

inf*[tiab] OR Street Drugs[mh] OR Narcotics[mh] OR Cocaine[mh] OR Crack Cocaine[mh] OR Heroin[mh] OR amphetamines[mh] OR methadone[mh] OR substance-related disorders[mh] OR Substance Abuse, Intravenous[mh] OR amphetamine-related disorders[mh] OR cocaine-related disorders[mh] OR marijuana abuse[mh] OR opioid-related disorders[mh] OR heroin dependence[mh] OR phencyclidine abuse[mh] OR psychoses, substance-induced[mh] OR substance abuse, intravenous[mh] OR substance withdrawal syndrome[mh] OR alcohol-related disorders[mh] OR alcoholism[mh] OR alcohol-induced disorders[mh] OR Circumcision, Female[mh] OR clitoridectomy[tiab] OR infibulation[tiab] OR communication barriers[mh] OR cultural characteristics[mh] OR cultural diversity[mh] OR vulnerable populations[tiab] OR sensitive populations[tiab] OR (mental*[tiab] AND (illness[tiab] OR ill[tiab] OR disorder*[tiab] OR impair*[tiab] OR disturb*[tiab] OR disabil*[tiab] OR retard*[tiab] OR handicap*[tiab] OR disabled[tiab] OR disability[tiab] OR disabilities[tiab] OR difficult*[tiab] OR impair*[tiab])) OR (depriv*[tiab] AND (neighborhood[tiab] OR economic[tiab] OR rural[tiab] OR urban[tiab] OR neighbourhood[tiab])) OR (poverty[tiab] AND (neighborhood[tiab] OR economic[tiab] OR rural[tiab] OR urban[tiab] OR neighbourhood[tiab])) OR (Cognitive*[tiab] AND (retard*[tiab] OR handicap*[tiab] OR disabled[tiab] OR disability[tiab] OR disabilities[tiab] OR impair*[tiab])) OR (learning[tiab] AND (retard*[tiab] OR handicap*[tiab] OR disabled[tiab] OR disability[tiab] OR disabilities[tiab] OR difficult*[tiab] OR impair*[tiab])) OR (psychotic[tiab] AND (ill[tiab] OR illness[tiab] OR disorder*[tiab] OR impair*[tiab] OR disturb*[tiab] OR disabil*[tiab])) OR (psychosis[tiab] AND (ill[tiab] OR illness[tiab] OR disorder*[tiab] OR impair*[tiab] OR disturb*[tiab] OR disabil*[tiab])) OR (psychoses[tiab] AND (ill[tiab] OR illness[tiab] OR disorder*[tiab] OR impair*[tiab] OR disturb*[tiab] OR disabil*[tiab])) OR (female AND ("genital mutilation"[tiab] OR circumcision[tiab] OR "genital cutting"[tiab])) OR (language[tiab] AND (second[tiab] OR problem*[tiab] OR additional[tiab] OR barrier*[tiab] OR translat*[tiab] OR interpret*[tiab])) OR (cultur*[tiab] AND (barrier*[tiab] OR difference[tiab] OR differences[tiab] OR different[tiab] OR practice*[tiab] OR sensitiv*[tiab] OR appropriate*[tiab])) OR (sociocultur*[tiab] AND (barrier*[tiab] OR different[tiab] OR difference[tiab] OR differences[tiab] OR practice*[tiab] OR sensitiv*[tiab] OR appropriate*[tiab])) OR (socio-cultur*[tiab] AND (barrier*[tiab] OR different[tiab] OR difference[tiab] OR differences[tiab] OR practice*[tiab] OR sensitiv*[tiab] OR appropriate*[tiab])) OR (ethnic[tiab] AND (black[tiab] OR asian[tiab])) OR African*[tiab] OR Middle eastern[tiab] OR Persian*[tiab] OR Ethiopian*[tiab] OR Muslim*[tiab] OR Moslem*[tiab] OR Islamic[tiab] OR Somali*[tiab] OR Nigerian*[tiab] OR Pakistani* OR Cantonese*[tiab] OR Hindu*[tiab] OR Arab[tiab] OR Arabs[tiab] OR Indian*[tiab] OR Chinese*[tiab] OR Turkish[tiab] OR Morrocan*[tiab] OR Surinamese[tiab] OR Greek*[tiab] OR Rwandan[tiab] OR Malawi[tiab] OR Sudanese[tiab] OR Tunisian*[tiab] OR Ugandan*[tiab] OR Caribbean*[tiab] OR Haitian*[tiab] OR Jamaican*[tiab] OR Bangladeshi*[tiab] OR Polish[tiab] OR Poles[tiab] OR Lithuanian*[tiab] OR Slovak*[tiab] OR emigrant[tiab] OR emigrants[tiab] OR fugitive[tiab] OR fugitives[tiab] OR non citizen[tiab] OR noncitizen[tiab] OR non citizens[tiab] OR noncitizens[tiab] OR minorities OR ethnicities OR foreign national[tiab] OR foreign nationals[tiab] OR displaced[tiab] OR alien[tiab] OR aliens[tiab] OR deportees[tiab] OR deportee[tiab] OR exile[tiab] OR exiles[tiab] OR multilingual[tiab] OR bilingual[tiab] OR bi lingual[tiab] OR multi lingual[tiab] OR non-english[tiab] OR nonenglish[tiab] OR illiterate[tiab] OR illiteracy[tiab] OR mother tongue[tiab] OR mother tongues[tiab] OR native tongue[tiab] OR native tongues[tiab] OR drug abuse[tiab] OR drug abuser[tiab] OR drug addict[tiab] OR drug abusers[tiab] OR drug addicts[tiab] OR substance abuse[tiab] OR substance abuser[tiab] OR substance addict[tiab] OR substance abusers[tiab] OR substance addicts[tiab] OR prostitutes[tiab]

OR prostitute[tiab] OR alcoholic[tiab] OR alcoholics[tiab] OR alcohol abuse[tiab] OR alcohol addiction[tiab] OR substance addiction[tiab] OR drug addiction[tiab] OR alcohol misuser[tiab] OR alcohol misusers[tiab] OR drug misuser[tiab] OR drug misusers[tiab] OR substance misuser[tiab] OR substance misusers[tiab] OR alcohol abuser[tiab] OR alcohol addict[tiab] OR alcohol abusers[tiab] OR alcohol addicts[tiab] OR alcohol user*[tiab] OR substance user*[tiab] OR drug user*[tiab] or grand multip*[tiab] or at risk[tiab] or safeguard[tiab] or safeguarding[tiab] or social service*[tiab] or child protection[tiab])

Appendix 2. On-line sources

General online resources	Maternity specific online resources	Other online resources
Google	Maternity action http://www.maternityaction.org.uk	RCN – social inclusion
Google Scholar	AIMS http://www.aims.org.uk/	FORWARD
NHS Evidence	NCT http://www.nct.org.uk/home	Foundation for People with Learning disabilities
Department of Health	Child and Maternal Health Observatory http://www.chimat.org.uk	Friends Families and Travellers
NHS SDO	Academy of nursing, midwifery and health visiting research www.researchacademy.co.uk	Health for Asylum Seekers and Refugees Portal
King's Fund library	Royal College of Midwives http://www.rcm.org.uk/	Information Centre about Asylum and Refugees
SCIRUS	Royal College of Obstetricians & Gynaecologists http://www.rcog.org.uk/	MENCAP
	On-line archive of midwifery articles www.intermid.co.uk/	MIND Positively Women
	Teenage Pregnancy Unit	NSPCC Library on child protection
	Maternity Alliance	Social Policy Digest
		Refuge
		Refugee Council
		Rethink
		Shelter
		Source
		UK Network of Sex Work Projects
		Women in Prison
		Women's Aid

Appendix 3. Map coding tool

Section A: Section 1

A.1 What are the characteristics of disadvantage of the study population	A.1.1 Ethnicity - describe A.1.2 Young women - describe A.1.3 Low socio-economic position - describe *Use this where the study population are economically deprived, living in an area of deprivation, have low educational attainment.* A.1.4 Substance abuse - describe A.1.5 Recent immigrant or refugee - describe *Recent = arrived in UK within last 2 years or as defined by the author* A.1.6 Does not have English as first language - describe A.1.7 Female genital mutilation A.1.8 Domestic violence A.1.9 Other - describe

Section B: Section 2 aspects of antenatal care

B.1 Does the study have a broader focus than antenatal care - e.g. uptake of health services by women generally?	B.1.1 yes - describe B.1.2 No
B.2 Does the study explicitly report women's views of, or researcher's findings related to uptake, initiation or booking antenatal care?	B.2.1 Yes B.2.2 No B.2.3 Unclear
B.3 Does the study FOCUS on specific types of ante-natal screening?	B.3.1 Yes - HIV B.3.2 Yes - domestic violence B.3.3 Yes - other biomedical screening - describe

	B.3.4 Yes - other psychosocial screening - describe
	B.3.5 Yes - other describe
	B.3.6 No - does not focus on screening alone
B.4 Does the study focus on ante-natal classes?	B.4.1 No
	B.4.2 Yes
B.5 Does the study focus on another aspect of ANC (e.g. decision making, model of care etc).	B.5.1 Yes - describe
	B.5.2 No
	B.5.3 Unclear - describe

Section C: Section 3 - aspects of study quality and methods

C.1 Does the study report it data collection methods?	C.1.1 Yes
	C.1.2 No
	C.1.3 Unclear
C.2 Does the study report its data analysis methods?	C.2.1 Yes
	C.2.2 No
	C.2.3 Unclear
C.3 Does the reviewer think that the study reports 'rich' relevant data or findings?	C.3.1 Yes
	C.3.2 No - details
	C.3.3 Unclear
C.4 What is the main method of the study?	C.4.1 Qualitative only
	C.4.2 Substantively qualitative with some quantitative
	C.4.3 Substantively quantitative with some qualitative

Appendix 4. Quality assessment tool

Section A: Administrative details

A.1 Name of reviewer	A.1.1 Josephine Kavanagh
	A.1.2 Jen Hollowell
	A.1.3 Laura Oakley
	A.1.4 Elaine Barnett-Page
	A.1.6 Carol Vigurs
A.2 Form of report	A.2.1 Journal article
	A.2.2 Report
	A.2.3 Book (chapter or whole)
	A.2.4 Manuscript
	A.2.5 Conference proceedings
	A.2.6 Multiple categories (due to linked papers (please specify)
A.3 Date of coding	A.3.1 details
A.4 unique identifier of each paper *Please enter EPPI-Reviewer ID for main and linked papers used for this coding*	A.4.1 details
A.5 Short title of paper *Authors' names - up to three, Author et al - if more than three authors (year)*	A.5.1 details

Section B: Aims and objectives

| B.1 Aims and objectives
3 sentences maximum - use authors description where possible | B.1.1 details |

Section C: Characteristics of women of interest to this review

C.1 Geographical location	C.1.1 Details
C.2 Sample number *What do we know about the sample size?*	C.2.1 details *please do a concise report of total sample and any relevant sub-samples etc* C.2.2 not stated
C.3 Age range *What do we know about the age of the sample?*	C.3.1 details
C.4 Class *Is there any indication of the social economic position of the sample*	C.4.1 yes: explicit C.4.2 Yes: implicit C.4.3 Not stated
C.5 Ethnicity *Is there any indication of the ethnicity of the sample?*	C.5.1 Ethnicity explicitly described C.5.2 Ethnicity implicitly described C.5.3 Is the study about 1 particular ethnic group?

C.6 Religion *Is there any indication of the religion of the sample*	C.6.1 Yes: explicit C.6.2 Yes: implicit C.6.3 Not stated
C.7 Were the women born in the UK?	C.7.1 Yes - details C.7.2 yes - mixed sample of women C.7.3 No - details C.7.4 unclear
C.8 Other information	C.8.1 Refugee or asylum seeker C.8.2 English not first language C.8.3 Gypsy and Traveller community
C.9 Are there social or medical aspects of the women's lives which increase their experiences of disadvantage (e.g. HIV, addictions)?	C.9.1 details
C.10 year/ time period over which the research was conducted	C.10.1 Details

Section D: Sampling, recruitment and consent

D.1 Population *Here capture info about which kind of population the sampling strategy was aiming for - e.g. did the sampling start with, a clinic or other organisational setting, or is there some other grouping of women used to identify them (e.g. households)?. If inclusion criteria were used, put here.*	D.1.1 details
D.2 Selection *Which strategy was used to select women from within any group (purposive, at random, opportunistically...)? Or what were the aims of sampling? This question can help us think about who might have been missed from the population that the sample was aimed at.*	D.2.1 details
D.3 Recruitment *How were women invited to take part (letters/phone) and who was involved in this process (clinicians/midwives/others?)?*	D.3.1 details
D.4 Consent *Was consent for participation requested?* *Was consent informed? e.g. information sheets were circulated before the interviews with time allowed to ask questions. Participants are fully aware they can choose not to participate or withdraw at any time.*	D.4.1 details

Section E: methods

E.1 Study design summary	E.1.1 semi-structured interviews E.1.2 un-structured interviews *e.g. informal discussions* E.1.3 focus groups E.1.4 Not stated
E.2 What is the main method of the study	E.2.1 Qualitative only E.2.2 substantively qualitative with some quantitative

	E.2.3 Substantively quantitative with some qualitative
E.3 Data collection methods *eliciting responses to pictures, creating posters, transcribing verbatim, observations from video*	E.3.1 reported explicit E.3.2 reported implicit E.3.3 not reported E.3.4 unclear
E.4 Data analysis methods *e.g. Interpretative phenomenological analysis, axial coding, grounded theory.*	E.4.1 Reported explicitly E.4.2 Reported implicitly E.4.3 Not reported E.4.4 Unclear

Section F: Study quality

F.1 Were steps taken to increase the rigour in the sampling? *Consider your answer from D1:* *Consider whether:* ** the sampling strategy was appropriate to the questions posed in the study (e.g. was the strategy well reasoned and justified)* **attempts were made to obtain a diverse sample of the population in question (think about who might have been excluded who might have had a different perspective to offer).* **characteristics of the sample critical to the understanding of the study context and findings were presented (i.e. do we know who the participants were in terms of for example, basic socio-demographics, characteristics relevant to the context of the study?)*	F.1.1 Yes, a fairly thorough attempt was made (please specify) F.1.2 Yes, several steps were taken (please specify) F.1.3 Yes, minimal steps were taken F.1.4 Unclear F.1.5 No, not at all/ Not stated (please specify)
F.2 Were steps taken to increase the rigour in the data collected? *Consider whether:* ** data collection was comprehensive, flexible and/or sensitive enough to provide a complete and/or vivid and rich description of people's perspectives and experiences (e.g. did the researchers spend sufficient time at the site/ with participants? did they keep 'following up'? Was more than one method of data collection used?* **Steps were taken to ensure that all participants were able and willing to contribute (e.g. processes for consent see D4), language barriers, power relations between service providers and women;*	F.2.1 Yes, a fairly thorough attempt was made (please specify) F.2.2 Yes, several steps were taken (please specify) F.2.3 Yes, minimal steps were taken (please specify) F.2.4 Unclear F.2.5 No, not at all/ Not stated (please specify)
F.3 Were steps taken to increase the rigour in the analysis of the data? *Consider whether:* **data analysis methods were systematic (e.g. was a method described/ can a method be discerned?* **diversity in perspective was explored* **The analysis was balanced in the extent to which it was guided by preconceptions or by the data* **quality analysis in terms of inter-rater reliability/agreement* **the analysis sought to rule out alternative explanations for findings (in qualitative research this could be done by, for example, searching for negative cases/ exceptions, feeding back preliminary results to participants, asking a colleague to review the data, or reflexivity*	F.3.1 Yes, a fairly thorough attempt was made (please specify) F.3.2 Yes, several steps were taken (please specify) F.3.3 Yes, minimal steps were taken (please specify) F.3.4 Unclear F.3.5 No, not at all/ Not stated (please specify)
F.4 Were the findings grounded in/ supported by the data?	F.4.1 Well grounded/ supported (please specify)

Consider whether: **enough data are presented to show how the authors arrived at their findings* **the data presented fit the interpretation/ support the claims about patterns in data* **the data presented illuminate/ illustrate the findings* **(for qualitative studies) quotes are numbered or otherwise identified and the reader can see they don't come from one or two people.*	F.4.2 Fairly well grounded (please specify) F.4.3 Limited grounding/ support (please specify)
F.5 Please rate the findings of the study in terms of their breadth and depth *consider whether :* *(NB it may be helpful to consider 'breadth' as the extent of description and 'depth' as the extent to which data has been transformed/ analysed)* ** A range of issues are covered* **The perspectives of participants are fully explored in terms of breadth (contrast of two or more perspectives) and depth (insight into a single perspective)* **richness and complexity has been portrayed (e.g. variation explained, meanings illuminated)* **There has been theoretical/ conceptual development*	F.5.1 Limited breadth and depth F.5.2 Good/ Fair breadth, but little depth F.5.3 Good/ Fair depth, but little breadth F.5.4 Good/ Fair breadth and depth
F.6 To what extent does the study privilege the views and experiences of women *Consider whether:* **there was a balance between open-ended and fixed response questions* **whether women were involved in designing the research* **There was a balance between the use of an a priori coding framework and induction in the analysis.* **The position of the researchers (did they consider it important to listen to the perspectives of women?)* **steps were taken to assure confidentiality and put women at ease*	F.6.1 Not at all (please specify) F.6.2 A little (please specify) F.6.3 **Moderately** (please specify) F.6.4 A lot (please specify)
F.7 Reliability *Guidance: Think (mainly) about the answers you have given to questions 1-4 above* *Are the methods adequate – or are flaws in approach likely to influence findings – GATE TOOL*	F.7.1 Low F.7.2 Medium F.7.3 High
F.8 How useful is this study in helping to answer the review question? *Does this answer our review question exactly? Were the findings such that, despite the quality of the study's methods, you would be disappointed to leave it out of the review?*	F.8.1 Very useful F.8.2 **Moderately** useful F.8.3 Not useful

Appendix 5. Reasons for excluding studies

	Reason for exclusion	Excluded at stage 1: abstract/title screening (n=8853)	Excluded at stage 2: full-text screening (n=289)
General	• Not English language	2	0
	• Not eligible publication type	27	0
	• Published before 1990	105	0
Population	• Not UK women	4856	9
	• Women not disadvantaged or vulnerable	9	93
Study focus	• Not about uptake or experiences of maternal care	2722	40
	• Views not relevant to review topic	0	9
Study methods	• Not a views study	1123	83
	• Other ineligible method	9	18
Other	• Unable to retrieve	-	32
	• Not main study report	-	5

Appendix 6. Details of views studies included in in-depth review

Study	Sample number and setting	Study population	Study design summary and data collection methods	Aim(s) of the research
Ali 2004 (*V1*)	43 women. UK: Leeds, Glasgow, Keighley, Luton, Manchester	**Ethnicity:** Iraqi, Pakistani, Bangladeshi, Indian, African, European, Somali **Born in the UK/outside the UK:** Mixed (UK/non-UK) **English language ability:** Mixed (some fluent, some spoke/read little English) **Asylum seekers/refugees:** No **Religion:** Muslim **Age range:** not stated **SES:** not stated **Other notable characteristics:** none stated **Recruited** through the study's advisory group	**Focus groups** Focus group discussions lasted 1-1.5 hours and were tape recorded, with permission. A topic guide was used to facilitate the focus groups.	
Bawadi 2009 (*V2*)	8 women. UK: The Midlands	**Ethnicity:** "Arab" (migrants from Jordan, Saudi Arabia, Syria, Algeria, Sudan and Egypt) **Born in the UK/outside the UK:** Outside UK, and in living in UK <10 years **English language ability:** Mixed **Asylum seekers/refugees:** No **Religion:** Muslim **Age range:** Not stated **SES:** Implicit – medium to high SES **Other notable characteristics:** none stated **Recruited** through religious and community groups	**Semi-structured interviews** Three in-depth semi structured audiotaped interviews were conducted with each woman; the first during the third trimester of pregnancy (28 weeks onwards), the second early in the postnatal period (1-2 weeks after birth) and the third one to three months later	• To explore migrant Arab Muslim women's experiences of maternity services in the UK. • To examine the traditional childbearing beliefs and practices of Arab Muslim society. • To suggest ways to provide culturally sensitive care for this group of women.

Study	Sample number and setting	Study population	Study design summary and data collection methods	Aim(s) of the research
Briscoe 2009 (V3)	**4 women.** UK: Lancashire	**Ethnicity:** Afghani, Congolese, Rwandan, Somali. **Born in the UK/outside the UK:** Outside UK **English language ability:** English not first language (3 participants required translation and 1 woman spoke fluent English). **Asylum seekers/refugees:** Yes (3 women were asylum seekers and in the UK <1 year, and one woman was a refugee in and the UK <3 years) **Religion:** Not stated **Age range:** 19-36 **SES:** Not stated **Other notable characteristics:** At least one of the women had suffered sexual violence in her country of origin **Recruited** through hospital records	**Semi-structured interviews** In- depth semi structured interviews carried at five points during the antenatal and postnatal period. Interviews were taped. Also field notes and photographs taken by the women.	• To explore and synthesize the experience of maternity care by female asylum seekers and refugees
Chan 2000 (V4)	**30 women.** UK: Manchester	**Ethnicity:** Chinese. **Born in the UK/outside the UK:** Mixed (majority not born in the UK) **English language ability:** Mixed (vast majority did not have English as first language). Interviewees rated their proficiency in English - 7 said 'good', 6 said 'average', 17 said 'poor') **Asylum seekers/refugees:** No **Religion:** Not stated **Age range:** 20-45 **SES:** Predominantly lower socio-economic class **Other notable characteristics:** None stated **Recruited** through immunisation records of health authority	**Semi-structured interviews (author description: "structured and unstructured interviews")** "Informal conversation interviews, based on a structured questionnaire" took place in women's homes. Interviews were "non-directive" and lasted approx 30 mins. Interviews not taped (pilot study showed interviewees uncomfortable with being taped), notes made straight after each interview	• To examine the views of users of primary healthcare services for the Chinese minority in Manchester

Study	Sample number and setting	Study population	Study design summary and data collection methods	Aim(s) of the research
Dartnall 2005 (*V5*)	38 women. UK: London?	**Ethnicity:** Pakistani, Bangladeshi, Somali, Romany. **Born in the UK/outside the UK:** [assumed] mixed. **English language ability:** [assumed] mixed. **Asylum seekers/refugees:** Mixed (5 were asylum seekers). **Religion:** The 3 Bangladeshi/Pakistani women were Muslim. Religion not stated for other participants. **Age range:** Not stated, but some were teenage mothers **SES:** Predominantly lower socio-economic class. **Other notable characteristics:** 26 were users of services; 12 were defined as "minimal users". Five women were teenage parents, four women were substance users (1 alcohol, 3 drug), 10 women had learning difficulties, and four women were homeless. **Recruited** through community organisations, local services and baby clinics	**Semi-structured interviews and focus groups** Mixture of "depth interviews" and "group discussions". All minimal users of services were interviewed; those who used services were either interviewed or took part in group discussions. Interview/discussion guide provide.	• To gauge awareness, knowledge and understanding of the ante and post-natal services and reasons for taking them up • To identify what information is available about maternity services and the extent to which this meets the needs of the target audiences in terms of credible sources, formats, timing and content • To explore and identify barriers to accessing the maternity service in relation to audience attitude towards the services: service format, location, engagement with health professionals, and delivery.
Davies 2001 (V6) *See also: Davies 2002 [115] (linked report)*	13 women. UK: Northern English city (unnamed)	**Ethnicity:** Somali. **Born in the UK/outside the UK:** Not stated, but the majority of participants had lived in the UK <10 years. **English language ability:** All English as a second language (all data collected conducted in Somali). **Asylum seekers/refugees:** No. **Religion:** Not stated. **Age range:** 21-40. **SES:** Author states information not collected. **Other notable characteristics:** None stated. **Recruited** through a community health worker, the interpreter and a voluntary organization.	**Semi-structured interviews and focus groups** Focus group discussions used a moderator's guide as a map to steer the discussion. The interview guide used a large number of probes which addressed issues in which participants had shown particular interest. All exchanges in English were translated into Somali by the interpreter and remarks in Somali were summarised in English. The interview guide was translated into Somali to ensure that concepts were not culture specific. Interviews were conducted in women's homes, often with children present. All discussions were audiotaped using two recorders to ensure against loss of data.	Aim: • To explore the maternity information concerns of a group of Somali women in a Northern English city and to investigate the relationships of these women with maternity health professionals. Research questions: 1. What are the people-based maternity information sources used by Somali women in the UK? 2. What are the perceptions of the health and maternity information obtained by the women?

Study	Sample number and setting	Study population	Study design summary and data collection methods	Aim(s) of the research
Gaudion 2008a (*V7*)	**59 women.** UK: Hillingdon, London	**Ethnicity:** Afghani, Chinese, Eritrean, Iraqi, Sri-Lankan, Somali, Ugandan**.** **Born in the UK/outside the UK**: Mixed. **English language ability:** Not stated. **Asylum seekers/ refugees**: Yes, majority. **Religion:** Not stated. **Age range: N**ot stated. **SES:** Not stated. **Other notable characteristics:** None stated. **Recruited** through the community.	**Semi-structured interviews and focus groups** Eight interviews were carried out with refugees. Seven focus groups were conducted with a total of 35 women from Afghanistan, China, Sri-Lanka, Ethiopia, Poland, Somaliland, Russia. Also conducted interviews with three British Indians and four white British to obtain a non refugee perspective on experiences of the maternity services. Two focus groups were conducted with women who were not asylum seekers and refugees (9 women). Focus groups and interviews were audio recorded and transcribed.	Aims: • To review the needs of asylum seeking and refugee women in relation to holistic care • To identify the gaps in maternity service provision for refugee and asylum seeker women in Hillingdon in order to make appropriate recommendations for changes to meet these needs. • To support the provision of the highest possible standard of care during pregnancy, birth and the postnatal period. • To gain insight from both the providers of support and the receivers in order to improve future priorities and resource allocation and consequently improvements in outcomes. • To inform the design of appropriate interventions and inform potential future needs within the broader health service Objective: 1. To identify and compile sources of information on the population of refugee and asylum seeker women that forms the client group for maternity services in Hillingdon.

Study	Sample number and setting	Study population	Study design summary and data collection methods	Aim(s) of the research
Gaudion 2007 (*V8*)	**59 women.** UK: London	**Ethnicity**: Women from the following communities: Black African (Ugandan, Ivory Coast, Nigeria, Democratic Republic of Congo, Sudan); Moroccan, Eritrea, Pakistani, Bengali, Yemen, Irish Travellers, Albanian, Somali, Chinese and Vietnamese. **Born in the UK/outside the UK:** Assume mixed (but not explicitly stated). **English language ability**: Mixed, sample included those with little or no English. **Asylum seekers/ refugees**: Some participants were asylum seekers/ refugees. **Religion:** Not stated. **Age range**: Not stated. **SES:** Not stated **Other notable characteristics**: Sample included women who were asylum seekers, refugees, homeless families, those with little or no English and women with mental health problems and/or problematic addiction. **Recruited** through the community	**Focus groups** Focus group discussions around development of a storyboard. Interpreters were used for the sessions where appropriate. The initial storyboard (produced as part of the wider project) was used to facilitate discussion.	• To improve access to maternity services for highly marginalised Black and minority ethnic women, including refugees, asylum seekers, women with little or no English and women with insecure immigration status. This pilot study was undertaken to explore the best means of consulting with communities and to suggest means of addressing imbalances in needs towards antenatal, birth and postnatal information and support.

Study	Sample number and setting	Study population	Study design summary and data collection methods	Aim(s) of the research
Gaudion 2006 (*V9*) *See also: Gaudion 2008c[116] (linked report)*	**380+ participants** (not all women). UK: London, Durham, Manchester, Liverpool, Dover and Leicester.	**Ethnicity:** participants were from Afghanistan, Albania, Algeria, Argentina, Bangladesh, Bolivia, Burundi, Cameroon, Canada, Democratic Republic of Congo, China, Egypt, Ethiopia and Eritrea, India, Jamaica, Hungry, Iran, Iraq, Israel, Ireland (Travellers), Ivory Coast, Kenya, Malawi, Mongolia, Morocco, Nigeria, Pakistan, Peru, The Philippines Poland, Portugal, Rwanda, Russia, Sierra Leone, Tanzania, Uganda, Somalia, Spain, Sri Lanka, Sudan, Tanzania, Turkey, Venezuela, UK (Black British and White British) Vietnam, Wales, Yemen and Zimbabwe. **Born in the UK/outside the UK:** Mixed. **English language ability**: Mixed, participants included women who do not speak English. **Asylum seekers and refugees:** Mixed. **Religion:** Not stated. **Age range: N**ot stated. **SES:** Not stated. **Other notable characteristics**: Sample included those from 'hard to reach' groups including: asylum seekers and refugees, women with insecure immigration status, homeless people, women with mental health problems/and or problematic addiction, migrant workers, women recently discharged from prison. **Recruited** through community organisations	**Semi-structured interviews and focus groups** Group discussions were led by the pictures and people's needs and interests at that point of time. Consultations took the form of interviews and focus group discussions, but also workshops and 'stalls' at health days and open presentations where the audience fed back their thoughts. It was pre-arranged or group-led as to whether notes were taken during the focus groups or not.	• "The project is interested in the views of women and their families about their knowledge and experiences and how we can make the resource better "

Study	Sample number and setting	Study population	Study design summary and data collection methods	Aim(s) of the research
Harper-Bulman 2002 (*V10*)	12 women. UK: West London.	**Ethnicity**: Somali. **Born in the UK/outside the UK:** Not stated. **English language ability: N**ot clear, although an interpreter was present for all interviews and focus groups. **Asylum seekers/ refugees:** Yes. **Religion:** Not stated. **Age range:** Not stated. **SES:** All living in local authority accommodation. O**ther notable characteristics**: Some women had experienced FGM. **Recruited** through snowballing from single contacts	**Semi-structured interviews and focus groups** Prompts for interviews and focus groups were discussed with two Somali women who were involved in facilitating the research and locating respondents.	• To develop an understanding of the reality faced by Somali women in their contacts with the maternity services in the UK
Hennings 1995 (*V11*)	4 women. UK: Milltown (a Northern Industrial town).	**Ethnicity**: Bangladeshi. **Born in the UK/outside the UK:** Born outside of the UK. **English language ability**: English not first language (interviews were conducted in the women's own language). **Asylum seekers/ refugees**: No. **Religion:** Not clearly stated, but majority assumed to be Muslim. **Age range:** 24-40 (latter age estimated). **SES:** Not stated. **Other notable characteristics**: None stated. **Recruitment** not reported	**Unstructured interviews** All interviews took place in the woman's home, were conducted in Sylheti and translated by a local community worker.	• To explore Bengali women's experiences of maternity care in one health district [author does not explicitly state].

Study	Sample number and setting	Study population	Study design summary and data collection methods	Aim(s) of the research
Jayaweera 2005 (*V12*)	**9 women.** UK: Leeds.	**Ethnicity:** Bangladeshi **Born in the UK/outside the UK:** Majority born outside UK. **English language ability:** Assumed all English as a second language, 6 reported limited fluency in English. **Asylum seekers/ refugees**: No. **Religion:** Not stated. **Age range:** 20–30 years. **SES:** Low levels of educational attainment and high levels of material disadvantage. **Other notable characteristics:** None stated. **Recruited** through neighbourhood project	**Semi-structured interviews** The interview schedule had a semi-structured format, containing questions about financial, employment and household circumstances, and about the women's experiences and views. Six of the interviews were undertaken in Sylheti by a member of the neighbourhood project staff, in the project building, in the presence of a member of the research team. All nine interviews were audio-taped in full. The six interviews in Sylheti were simultaneously translated into and transcribed in English and checked for accuracy by another Sylheti-speaking staff member. The remaining three interviews conducted in English were transcribed by a professional transcribing service.	• To examine the circumstances, experiences and needs of a local sample of low-income, childbearing women of Bangladeshi origin in the UK.
Katbamna 1993 (*V13*) *See also: Katbamna 2000[117] (linked report)*	**31 women.** UK: London (Harrow) and London (Camden).	**Ethnicity**: Gujarati (Indian/East African) and Bangladeshi. **Born in the UK/outside the UK:** Predominantly born outside UK (1 UK born, 13 born in Bangladesh, 4 born in India, 13 born in East Africa). **English language ability**: Not stated, although low levels of literacy were reported. **Asylum seekers/ refugees**: No. **Religion:** Hindu, Muslim. **Age range:** Early twenties and below with a few who were in the age range thirty-five and over. **SES**: Mixed. Bangladeshi women were predominantly from the lower end of the socioeconomic scale, Gujarati women were predominantly in social class I/II. **Other notable characteristics:** None stated. **Recruited** through GPs and clinics	**Semi-structured interviews** All the antenatal interviews were conducted in the mother's home and each interview lasted between one and two hours. The interview schedule was piloted. Interviews were conducted in Bengali if requested. Efforts were made to use researchers that were acceptable to the participants (married, with children). Researchers were trained and topic guide revised.	• To enable two different groups of Asian women to talk about their childbirth experiences from their own perspective.

Study	Sample number and setting	Study population	Study design summary and data collection methods	Aim(s) of the research
McCourt 2000 (*V14*)	**26 women.** UK: West London.	**Ethnicity:** Black Caribbean, African, South and East Asian, and Mediterranean or Middle Eastern women; also refugees from Eastern European and African states. **Born in the UK/outside the UK:** Mixed. **English language ability:** All but two women spoke fluent English. **Asylum seekers/ refugees:** Mixed. The six Somali women were refugees and the list of women contacted included some refugees from Eastern Europe and Africa. **Religion**: Not stated. **Age range:** Not stated. **SES:** Not stated. **Other notable characteristics:** None stated. **Recruited** through clinical audit of women's hospital records	**Semi-structured interviews** A semi-structured, narrative approach was taken using a brief schedule designed to encourage open responses. Women were invited to `tell their story' and then asked them to think about what was helpful or what could be improved about each stage of maternity care.	• To explore the maternity care views and experiences of minority ethnic women who did not respond to a postal survey of mothers' responses to care and to assess whether the concept of continuity mattered to them.
McLeish 2002 (*V15*) *See also: McLeish 2005 [118] (linked report)*	**33 women**. UK: Manchester, Plymouth, Hastings, Brighton, Oxford, Kings Lynn, London.	**Ethnicity:** women from Afghanistan, Angola, Bangladesh, Burundi, Czech Republic, Democratic Republic of Congo, Eritrea, Ghana, Iran, Iraq, Kosovo, Lithuania, Nigeria, Poland, Sierra Leone, Somalia, South Africa, Turkey, Uganda **Born in the UK/outside the UK:** Born outside UK. **English language ability:** Mixed (ability varied from knowing only a few words to fluency). **Asylum seekers/ refugees:** Yes (24 asylum seekers and nine refugees). **Religion:** Not stated **Age range:** 16 to over 40. **SES:** Low SES. **Other notable characteristics:** Some participants were HIV positive. **Recruited** through support project, health professional and snowballing	**Semi-structured interviews** Interviews were tape recorded and subsequently transcribed by the researcher.	Authors state that the report is an attempt to enable asylum-seeking mothers' voices to be heard in the policy debates

103

Study	Sample number and setting	Study population	Study design summary and data collection methods	Aim(s) of the research
Nabb 2006 (V16)	10 women. UK.	**Ethnicity:** Women from Algeria, Congo, Angola, Nigeria, Somalia and Iraq. **Born in the UK/outside the UK:** Born outside UK. **English language ability:** All had English as a second language. **Asylum seekers/ refugees:** Yes, all asylum seekers. **Religion:** Not stated. **Age range: N**ot stated. **SES: N**ot stated. **Other notable characteristics: N**one stated. **Recruited** through Refugee Helpline	**Semi-structured interviews** Semi-structured interviews were conducted in privacy in participants' emergency accommodation and audio-taped. Prior to each, participants were again informed of the nature of the interview and assured of confidentiality. Field notes were taken during the interviews where necessary, and notes were made afterwards on issues such as rapport between interviewer and participant. The English on the audiotapes was transcribed verbatim and the scripts checked while listening to the tape. Duplicate tapes were given to second interpreters with the English transcripts for verification of initial translations.	Aim: • To explore the perceptions of pregnant asylum seekers in relation to the provision of maternity care experienced while in emergency accommodation. Objectives: 1. Determine the expressed needs of pregnant asylum seekers regarding maternity care 2. Ask women for accounts of the quality of care received 3. Clarify the provision of maternity care by the healthcare professionals
Puthussery 2010 (V17) *See also: City University 2007[119], Twamley 2009[120] (linked reports)*	34 women. UK: London and Birmingham.	**Ethnicity:** Indian, Pakistani, Bangladeshi, Black Caribbean, Black African, Irish. **Born in the UK/outside the UK:** Born in the UK. **English language ability: N**ot stated. **Asylum seekers/ refugees**: None. **Religion:** Not stated. **Age range:** Under 20 to 40 and over. **SES:** 17 were educated to at least degree level, 5 were educated to A level standard, and 12 were educated to GCSE level or below. **Other notable characteristics:** None stated. **Recruited** through NHS Maternity Units	**In-depth semi-structured interviews** Interviews were carried out by two of the researchers between 3 months and 1 year after childbirth. A flexible topic guide was used for the interviews. Interviews were tape-recorded (with permission from participant) and written consent obtained before the interview. The average duration of the interviews was one hour.	• To explore the maternity care experiences and expectations of United Kingdom (UK)-born ethnic minority women

Study	Sample number and setting	Study population	Study design summary and data collection methods	Aim(s) of the research
Raine 2010 (*V18*)	**15 women**. (Additionally, 15 white British women also participated in the study) UK: London.	**Ethnicity:** Bengali, Somali. **Born in the UK/outside the UK:** Mixed. **English language ability:** Mixed (6 women were English-speaking, 9 women were non-English speaking). **Asylum seekers/ refugees: N**ot stated. **Religion: N**ot stated. **Age range:** Average age 30.2 years. **SES:** Highest educational qualification: None (n=4), GCSE (n=7), A level (n=2), degree (n=2). **Other notable characteristics: N**one reported. **Recruited** through hospital antenatal clinics, community antenatal clinics and a community parenting group.	**Semi-structured interviews and focus groups** Participants were given a choice of interview or focus group. A standardised topic guide was used. The focus groups and interviews were audio-recorded, translated into English where necessary, and transcribed verbatim.	• To identify key features of communication across antenatal (prenatal) care that are evaluated positively or negatively by service users. • To explore communication experiences of thirty pregnant women from diverse social and ethnic backgrounds affiliated to a large London hospital.
Richens 2003 (*V19*)	**18 women**. UK: Coventry.	**Ethnicity:** Pakistani. **Born in the UK/outside the UK:** Mixed. **English language ability:** Mixed (6 of the 18 women did not speak English at all and a further 3 learnt English since arrival in the UK). **Asylum seekers/ refugees:** No. **Religion**: Some women were Muslim . **Age range:** Not stated. **SES:** Women from disadvantaged areas. **Other notable characteristics:** None stated. **Recruited** through community centres and GPs	**Focus groups** Each focus group included between three and five women, as well as the researcher and the research assistant, The author also reflects on the dynamics during the focus group discussions and how this may have affected the data collected.	Aim: • To explore the experiences of a group of Pakistani women who had made use of maternity services in the UK. Objectives: 1. To describe the women's experiences 2. To place this experience in the context of current health care policy 3. To make suggestions on ways to improve maternity services'

Study	Sample number and setting	Study population	Study design summary and data collection methods	Aim(s) of the research
Straus 2009 (*V20*)	**6 women.** UK: London.	**Ethnicity:** Somali. **Born in the UK/outside the UK:** Born outside UK. **English language ability:** Assumed English was not their first language, although only one interview required an interpreter. **Asylum seekers/ refugees:** Not stated. **Religion:** Not stated. **Age range:** 23-57 years. **SES:** Not stated. **Other notable characteristics:** It is implied that some of the interviewees had experienced FGM given that the author states that FGM is a widespread practice in Somalia - estimates of 95%. **Recruited** through two community Somali womens' groups	**Semi-structured interviews** Ethnographic approach, in-depth individual interviews which were semi-structured. No definite research questions as it was felt that this would allow issues that were most pressing for the participants, rather than those defined by the researcher. One interview was conducted using an interpreter, who was a friend of the participant. Interviews were recorded and transcribed.	Aim: • To use a narrative approach to examine cultural and social aspects of childbirth, and to determine how they intersect with the needs and experiences of Somali women in the UK. Objective: 1. To conduct a qualitative study of perceptions of experiences of childbirth from Somali health workers in the UK.

Study	Sample number and setting	Study population	Study design summary and data collection methods	Aim(s) of the research
Waugh 2010 (*V21*)	**20 women** UK: Leeds.	**Ethnicity: N**ot stated. **Born in the UK/outside the UK:** Not stated. **English language ability:** Assume none had English as a first language. Interpreters used in eight interviews, although interpreters were offered to all women regardless of perceived level of spoken English. **Asylum seekers/ refugees:** Yes, all either asylum seekers or refugees. **Religion:** Not stated. **Age range:** Not stated. **SES: N**ot stated. **Other notable characteristics:** None stated. **Recruited** through statutory and voluntary sector services	**One-to-one semi-structured interviews.** Two stages - firstly, all women were invited to a one-to-one half hour introductory meetings. The interviews used a narrative approach. A series of open prompts were used - covering different stages of the maternity process. Interviews lasted between 1-2 hours. All but one of the interviews were recorded and then transcribed. The majority of women were interviewed in women's homes, five were carried out in other venues. Interpreters were offered to all women, and used in eight interviews (one additional woman asked to use her daughter as an interpreter). All the interpreters were female and had experience of interpreting for women within a health/maternity service.	Aim: • To look at the experiences of asylum seekers and refugees in Leeds and to give women the chance to tell their stories of being pregnant, giving birth and becoming mothers in exile. Objectives: 1. To bring these experiences together and to identify appropriate support that is taking place in order to build on it 2. To evidence and demonstrate gaps in current maternity services 3. To raise the awareness of policy makers, service providers and commissioners of the experiences and needs of pregnant women seeking asylum in Leeds.

Appendix 7. Supplementary views data: fear of being labelled, judged or discriminated against

Women's fear of discrimination was evident only from them talking about experiences later in pregnancy. Given the importance of preventing discrimination, data relating to this theme are presented here.

> *Most Bengali women, they can't speak English, and…I see that [Bengali women are] treated bit different… [midwives] are quite polite and nicely speaking to the English ladies…but I can see it's different treatment [towards Bengali women]* (V18)

Amongst some minority ethnic groups there was a fear that people who worked in the maternity services were not going to treat these women in the same way as other women and this would prevent them from going to a GP or midwife about their pregnancy. This fear often came about either from previous experiences of health services and how women have been treated in the past, or by hearsay (**V5**).

> *"A lot of women won't mix with non-travellers because we don't want to be judged. A lot of people – you say you're a traveller and you're judged like that and they say 'oh they're gypsies, they live in trailers, their children eat off the dump' and everything else."*
> (**V5** Romany Traveller)

> *"As soon as you say you're from the travelling minority, you get segregated from everyone else, like get her in, get her out and if you've got any questions they talk to you like you don't know nothing."* (**V5** Romany Traveller)

Somali women described health professionals, including doctors, nurses, midwives and health visitors, making stereotypical judgments that led to women feeling patronised and not in control of their birth. These stereotypes revolved around ideas that Somali women were unintelligent, lacking in knowledge about pregnancy or childbirth and were unaware of family planning, due to the number of children they have.

> *"The midwife-she thinks that you have the babies under the tree and they have a low expectation. How can these people afford this? Why are they complaining if they receive this?" (*V20 Somali woman)

One woman suggested that she had received inappropriate treatment as a result of assumptions made by health professionals concerning her requirements:

> *"People in the hospital make judgments about you, and (so) you're angry "* (**V6** Somali woman).

A study of Muslim women found a perception amongst both women and men that a lack of understanding about Islam means maternity services are insensitive and sometimes even racist in their policies, practices and procedures. Several women thought that discrimination had increased in recent years because of fears about Islamic fundamentalist terrorism, with health staff seeing Muslims as 'different' and 'dangerous':

> *"Before (September 11th) people used to think you are different, now they think you are different but you could be dangerous as well."* (V1 Muslim woman)

> *"With the hijab they know immediately you are a Muslim, whereas if I am not wearing a hijab you don't know if I am Hindu, Sikh or Muslim and you wouldn't be seen as a threat."* (V1 Muslim woman)

In contrast, several women described very positive experiences with non-Muslim staff.