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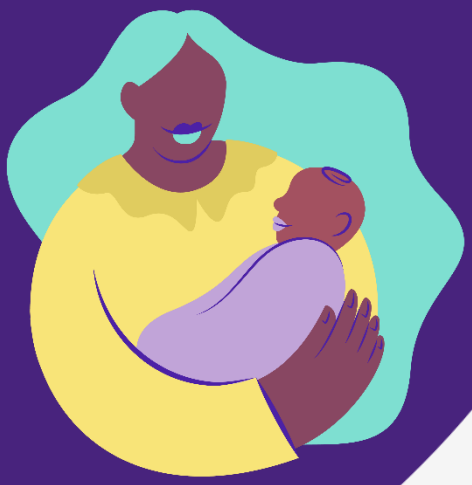
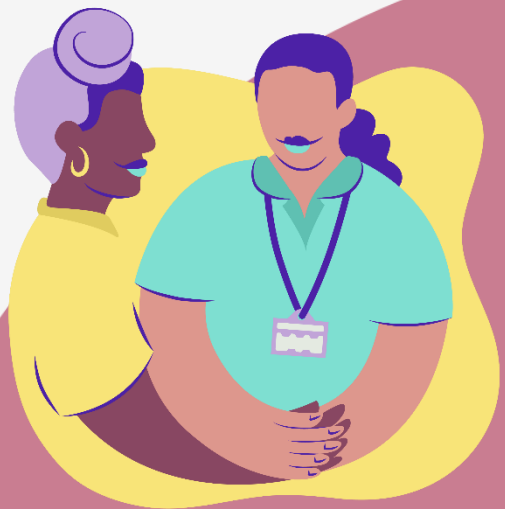


Cultural competency training to improve the care of black mothers – a rapid review

Authors: Ms Lauren J Scott and Dr Loubaba Mamluk



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Affiliation

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Assurance rating

*This report can be used for context and background information	
**This report can help inform decision making, when considered with other information	✓
***This report is the best available evidence to date	

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Contents

Project Background

The Black Maternity Matters pilot project was designed and implemented using improvement methodology, which is a popular approach to conducting tests of change to support quality improvement in healthcare.[1] Using PDSA cycles in this way can help deliver improvements in patient care through a structured experimental approach to learning and tests of change.

The pilot was designed to deliver meaningful, actionable improvements to reduce inequity of outcomes for Black women within maternity systems through a collaborative QI approach. This included a regional QI collaborative of midwives and maternity support workers (MSWs) to support psychological safety, peer support and QI coaching. A key component of the pilot was the delivery of cultural competency and diversity fluency education for midwives and MSWs. The training education aimed to examine unconscious biases and the role of the individual in perpetuating unsafe systems of care for Black women. Following this, the pilot aimed for midwives and MSWs to co-produce and implement small tests of change aimed at optimising outcomes for Black women within maternity systems.

The training and later aspects of implementing QI approaches in maternity systems formed the basis for an evaluation. To complement the evaluation findings, the West of England AHSN collaborated with the NIHR Applied Research Collaboration (ARC) West to commission a rapid evidence synthesis. Our evaluation summary report can be found here: Black Maternity Matters - West of England Academic Health Science Network (weahsn.net).

Background

Perinatal mortality is approximately four times higher in black women than white women.[2] Further, black babies are more than twice as likely to be stillborn than white babies.[3] There are no clinical reasons which can explain these large mortality gaps, suggesting that it is likely to be caused, at least in part, by a lack of cultural understanding.

As part of the West of England AHSN Black Maternity Matter project, it was of interest to explore whether any cultural competency training has been evaluated to date.

Aim

The aim of this rapid review was to identify all studies to date which have evaluated cultural competency training.

Methods

The search strategy was developed by an information specialist with input from the study team. Key search terms included “black”, “African”, “BAME”, “race”, “pregnant”, “maternity”, “midwife”, “education”, “cultural competence”, “race knowledge”, and many derivatives and synonyms for these words. MEDLINE; Embase; PsycINFO; CINAHL; Scopus; Epistemonikos and Google Scholar were searched for review documents in the first instance (7th Nov 2022), and were pre-screened by the information

specialist for relevance. A second search was conducted for primary studies on MEDLINE and CINAHL only (14 and 21 Nov 2022). A grey literature search was also performed.

Titles and abstracts were independently screened by two reviewers, and discrepancies were resolved by discussion. Full text papers/reports were obtained for titles and abstracts which appeared to meet the inclusion criteria, and again were independently screened by two reviewers with discrepancies resolved by discussion. Papers were included in this report if they studied cultural competency interventions (they did not have to explicitly use this term), the target beneficiaries of the intervention included perinatal black women, and these women were minorities within the communities studied.

Findings

After deduplication and pre-screening, a total of 436 records were dual screened by title and abstract. Of these, 39 full-text documents were retrieved and read in full, and of these 6 papers are included in this report.[4-9] Five papers report outcomes,[4-7,9] and one paper is a protocol for a study which has not yet completed.[8] Training was delivered in a number of different ways across different studies, but essentially the purpose of all interventions was to raise awareness of implicit bias and stereotype, and to improve cultural competence (Table 1). While most studies covered training for midwives, others included a variety of staff from different professional background who may interact with perinatal women.

Three studies were conducted in the USA, [4,8,9] one in the UK,[5] one in Denmark,[6] and one across Greece, the UK, and the Netherlands.[7] The target beneficiaries of the cultural competency interventions were specifically perinatal black (African American) women in one study (conducted in the USA), and for all other studies included perinatal black women amongst other ethnic minorities and/or migrants and/or high-risk groups (Table 1). In three studies, the training was aimed at midwives (and/or student midwives), two studies included all staff who may come into contact with perinatal mothers or new-borns (including midwives), and one study more broadly trained student nurses. Four studies were a pre-post design, assessing knowledge of cultural issues before and after the intervention, one was a cross-sectional mixed methods evaluation qualitatively assessing how knowledge had improved following the intervention, and one was a protocol for an ongoing difference-in-difference study (Table 1).

Intervention types varied; however most were structured as training sessions. These including face-to-face and online modules. One included follow-up dialogue meetings as well as health education material using both leaflets and a smart app.[6] Implicit bias and stereotyping were part of the training carried out in the UK study.[5]This study also used black resuscitation mannequins in their training. Studies that included migrant women[6,7] looked at migration issues women face. The sessions contained respectful care, trauma awareness and effective communication training. The sessions consist of case scenarios, role play, mini lectures, and exchange of personal experience of caring for migrant women. One of the studies included information on the impact of racism on maternal health in addition to health disparities. This was carried out as a whole day training[8]. The study which involved nursing students structured

their training on virtual patients with information on their pre-and postnatal periods. The students were then asked to develop care plans[9].

Most studies evaluated the success of the intervention by assessing learning, skills and knowledge achieved by the staff and students exposed to the intervention and/or their opinions about the training. Only one study, which is ongoing, aims to assess maternal outcomes[8].

Overall, the interventions were found to be acceptable, useful, and to improve knowledge and on cultural issues. Most studies found that training resulted in increased awareness and reflection or new learnings on inequality. The study carried out with nursing students highlighted the ability to strengthen cultural competency. An ongoing study (finding not yet available) covers a large number of staff from different professions that have interactions with perinatal women, taking into consideration how barriers could be tackled at different stages. This is also the only study aiming to measure change in maternity outcomes.

Conclusions

The large perinatal mortality gaps between black women compared to white women has led to an increased number of charities and organisations supporting midwives to reduce this gap in mothers and babies. We found a small number (6) of studies looking at cultural awareness training, most of which were carried out in the USA aiming at the reduction of perinatal racial/ethnic disparities. The results indicate a positive acceptability and improved knowledge of cultural awareness in staff, most of whom were midwives. It is unknown, however, if these learnings will be sustained or contribute to reduced perinatal racial and ethnic disparities.

The studies were carried out between 2012-2016. Long term comparisons of maternal outcomes before and after interventions could lead to a better understanding of whether these types of training need to be introduced at several timelines for all staff and which are most sustainable and effective. A recent ongoing study[8] appears to be the most robust, controlled study to date evaluating the effects of culturally competency training on maternal outcomes in African American women; its findings are expected after the final implementations of its intervention in 2025.

Table 1: Summary of included studies

Author and Year	Country and Study design	Patient population	Staff population	Intervention	Control	Outcomes	Summary of findings
Arrington et al 2021[4]	USA. Pre-post design.	Ethnic minorities, in particular non-Hispanic black. In their hospital: 57% white, 23% black, 5% Asian, 0.3% American Indian/Alaskan native, 11% other.	Staff who cared for perinatal clients and newborns during inpatient and outpatient visits, including health care providers, administrators, and support staff.	Reduction of Perinatal Racial/Ethnic Disparities Patient Safety Bundle. Health equity party, snack and learn sessions, staff meeting presentations, online modules to complete individually. Examples on implicit bias in care were shared during educational events.	None.	3 questions (7 point likert scale) assessing staff beliefs about the extent to which patient behaviour, health care provider behaviour and social/economic conditions contribute to racial/ethnic disparities. 4 questions assessing engagement in activities related to reducing disparities. 1 question assessing agreement with the statement "I am in a position to make a difference in the quality of care that racial and ethnic minority patients receive"	"This quality improvement project demonstrated that interventions at the health care organization level can be effective in influencing health care providers and staff to address racial and ethnic perinatal disparities." "It is not clear that project gains will be sustained or contribute to the critical outcome of reducing perinatal racial and ethnic disparities."
Chubb et al 2022[5]	UK. Pre-post design.	Black, Asian and minority ethnic groups.	Midwives and student midwives.	A training session on implicit bias, stereotyping, jaundice, assessment of perfusion at birth and beyond and reviewing 'red flag' advice for parents upon discharge. New black resuscitation low-fidelity mannequins were purchased and used in the training.	None.	Pre and post intervention understanding of inequality and bias. Usefulness of the training (likert 1-5).	The training was mostly thought to be very useful. Many midwives were surprised to learn there was so much inequality. Many suggested they would take the learning forward. A few were not ready to accept change is required.

Author and Year	Country and Study design	Patient population	Staff population	Intervention	Control	Outcomes	Summary of findings
Damsted Rasmussen et al 2021[6]	Denmark. Simple post-intervention evaluation.	Non-Western immigrants and socially disadvantaged women.	Midwives.	MAMAACT intervention. A six-hour training session in intracultural communication and cultural competence, and two 1-hour follow-up dialogue meetings for all midwives. Health education material (leaflet and smart app) on warning signs of severe pregnancy complication and how to respond for pregnant women.	None.	Lots of patient outcomes, and midwives thoughts about the leaflet/app (this part of the intervention is not cultural competency).	"The training increased the awareness and reflections on their communication with women from various social and cultural backgrounds. Organizational barriers including lack of time, flexibility in ANC visits, and poor quality of interpreter services as well as habitual interaction patterns made it challenging for midwives to change practice and make room for more needs-based communication."
Fair et al 2021[7]	UK, Greece and Netherlands. Pre-post design.	Migrant women.	Midwives	Operational Refugee and Migrant Maternal Approach (ORAMMA). Training included 3 modules: 1) Background to migration and issues these women face 2) An overview of maternity care of migrant women 3) Challenges of and simulated opportunities around effective communication and compassionate, respectful, trauma	None.	Pre and post intervention questionnaires around midwives' knowledge, attitude, skills and self-perceived cultural competence (SPCC). Interviews to explore midwives' experiences of the project, the training package, and caring for migrant women within the ORAMMA project.	"Compassionate and culturally sensitive maternity care training resulted in significantly increased knowledge, self-perceived cultural competence and skills scores among midwives." "The training was generally well received by the midwives, who felt it would influence the care they would

Author and Year	Country and Study design	Patient population	Staff population	Intervention	Control	Outcomes	Summary of findings
				aware and culturally competent care. Sessions involved: role play, group discussions, case scenarios, mini lectures and time to exchange personal experiences of caring for childbearing migrant women.			provide to recently arrived migrant women."
Johnson et al 2022[8]	USA. Protocol for difference-in-difference study.	African American women	Anyone interacting with African American perinatal women related to their health, including health system administrators, physicians, residents, midwives, nurses, front desk staff, schedulers, public health officers, EPC staff, doulas, WIC staff, and lactation consultants	Training is a day-long training session including info on: health disparities, social determinants of health, African (American) history, impacts of racism on maternal health, structural challenges and assets in AA neighbourhoods, how health care practices can be more respectful, flexible and responsive to women's needs.	Comparison counties with no intervention	Severe maternal morbidity during antepartum, intrapartum or up to 12 months postpartum. Maternal death. Non-severe maternal morbidity (NSMM). Number of direct (e.g. delivery complications), indirect (e.g. mental disorders) and co-incidental (e.g. partner violence) NSMM diagnoses and procedures. Cost effectiveness will also be explored.	No findings yet- protocol paper.
Weideman et al 2016[9]	USA. Pre-post design.	African American and Amish.	Accelerated second degree nursing students.	Across two sessions, virtual patients (one African American, one Amish) were presented	None.	The transcultural self-efficacy tool was used to assess students pre and post intervention. It consisted of 83	"This research demonstrated an innovative way to build

Author and Year	Country and Study design	Patient population	Staff population	Intervention	Control	Outcomes	Summary of findings
				to the students via blackboard. They were guided through their 'story' and provided info about their pre- and post-natal periods. In groups, they had to ask questions about the patient for further info that wasn't presented in the original info, and then develop a care plan once they had all the info they wanted.		items assessing three subscales: cognitive (knowledge of cultural factors), practical (confidence in interviewing) and affective (cultural self-awareness). A care plan rubric assessed the students ability to design a culturally appropriate plan. They were also asked what they thought of the course using a number of likert based and open-ended questions.	capacity through collaboration. By sharing resources and faculty expertise, the universities involved in the study were able to simulate clinical maternal-child health promotion experiences within diverse, underserved, and high-risk vulnerable populations. The virtual simulation experience enabled students to transcend geographic barriers, gain access to diverse cultures and, thereby, strengthen their cultural competence."

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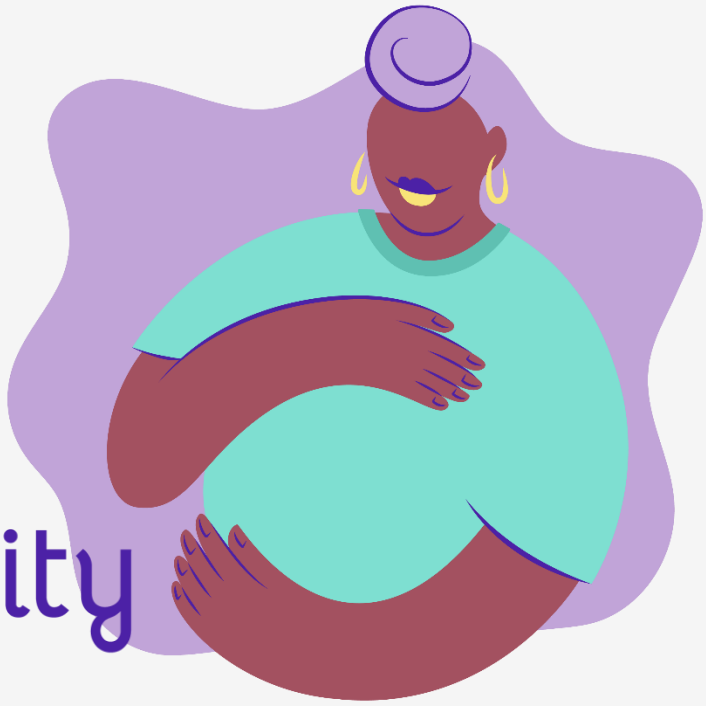
Black Maternity MATTERS



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