

Final report prepared for the Burdett Trust for Nursing

Enhancing antenatal care uptake in an ethnically diverse maternal cohort: a retrospective study to develop an intervention.

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Background

Previous studies have shown that Black women are four times more likely to die during pregnancy and childbirth compared to white women. For those who are Asian, the risk is two



times greater. Although there are many possible reasons for this, low engagement with antenatal care plays a part.

The World Health Organization recommends women attend at least eight antenatal classes as a preventative measure against adverse outcomes. However, Black and Asian women are less likely to start antenatal care early or receive the full course of appointments.

Aims of the research

Antenatal care is provided to an expectant mother by health care professionals from the time the pregnancy is confirmed until the start of labour. Starting antenatal care after the recommended 10 weeks of pregnancy and/or poor attendance at antenatal appointments can negatively impact the health of mothers and babies; both during and after pregnancy.

Research shows that women from Black and minority ethnic backgrounds tend to be more likely to start antenatal care later in pregnancy than the recommended period compared to White women.

This research project focussed on mothers in Luton; an ethnically diverse and socially deprived area in the East of England and had two aims:

1. To understand why women are starting antenatal care late and/or do not attend the recommended number of antenatal care appointments
2. To work with mothers/fathers and maternity care providers (such as midwives, doctors and health visitors) to jointly produce community-based initiatives to support women starting antenatal care on time, and to engage with the required number of antenatal

care appointments. The community-based initiatives produced had to be bespoke to the needs of the diverse local community.



“Antenatal care is vital in helping to keep women and their unborn babies safe and the earlier women can access it the better. Increasing the early uptake of antenatal care for women from underserved communities is vital. The only way to tackle this is to understand the barriers these women typically face so that effective solutions can be put in place.”

Results of the research

To achieve the first aim, Dr Puthusery conducted analyses using data of 46,307 women who gave birth in Luton and Dunstable hospital between April 2007 and March 2016. The hospital provides services to a very ethnically diverse group of mothers.

The analysis found proof that mothers from diverse communities did not attend antenatal care as early as from other groups:

- More than one third (34%) of the births were to mothers from one of the ethnic minority groups such as Black Caribbean, Black African, Indian, Pakistani, and Bangladeshi.
- Of the above, just over 85%, lived in the three most deprived areas of Luton.
- About one fifth of the women did not start antenatal care within the recommended 12 weeks of pregnancy.
- Mothers from all ethnic minority groups were more likely to have their booking appointment later than 12 weeks compared to White British mothers, with the highest proportion occurring among Black African mothers (34.2%) followed by mothers from Black Caribbean backgrounds (29.0%).
- More than two thirds (69.69%) of mothers who had their booking appointment more than 12 weeks into their pregnancy, lived in the two most deprived areas.
- More than a quarter of all preterm (27.6%) and low birth weight (26.0%) babies were born to mothers who started antenatal care late.

Subsequently, Dr Puthusery brought together the evidence from existing research studies in a systematic way to understand ethnic minority women's experiences of accessing



antenatal care in high-income European countries. This highlighted several interconnected factors influencing access to antenatal care for ethnic minority women, from location and finances through to content and location of appointments.

Negative experiences of stigmatising, discriminatory attitudes from healthcare providers, language barriers and a failure to meet women's basic information needs acted as explicit barriers to access. Key factors improving access

to antenatal care included building trusted relationships between women and their healthcare professionals, effective communication, and geographically close appointments.

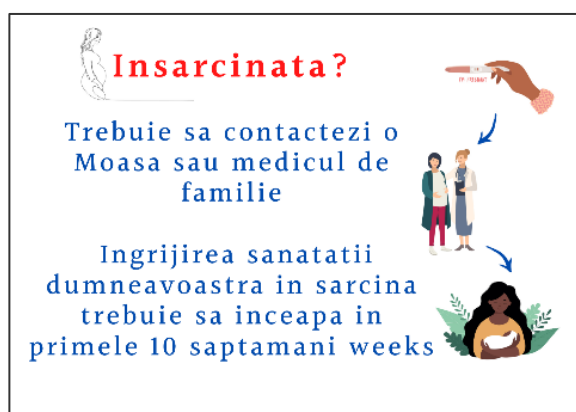
The complex setup and bureaucracy of maternity services was also highlighted as a risk factor, particularly for those who don't speak the local language, are worried about their migration status or are concerned about costs associated with healthcare.

The research team suggested six recommendations to improve access to antenatal care in high-income countries like the UK. These include:

- antenatal health care professionals receiving training in culturally safe care
- maternity services working with local third sector organisations
- promoting early initiation of antenatal care services
- basing services locally
- the use of interpreters and availability of accessible information on legal rights and entitlement to maternity care.

A practical intervention

Based on the findings from the data analysis and the evidence review, the team worked with parents and healthcare professionals to jointly produce and deliver a tailored community-based initiative to improve the timely start of antenatal care.



In order to co-produce this initiative, the team conducted interactive group meetings and one-to-one conversations with 20 local parents and 13 maternity care providers working locally with pregnant women. During the meetings, the team introduced the findings of the data analysis and the evidence on the barriers and facilitators that women face while accessing antenatal care. Participants were engaged in activities to stimulate creativity to design ideas for key messages, materials and events to

increase antenatal care uptake in Luton.

Community-based interventions were developed based on the key messages from the workshops which were:

- To explain the referral process to antenatal care
- To show how to get support in early pregnancy,
- To show the timeline for antenatal care

The most appropriate way in which to present the information was discussed with women and professionals. From these conversations, the team identified what needed to be said (message), how best to say it including appropriate written information (method), and the medium (what resources do we need to say it). They also mapped out busy areas within the locality to determine where to deliver the community programme.



Regarding the 'message', two intervention scripts were developed, for one-to-one engagements and for group sessions. As part of the 'method' component, areas of high footfall and community and faith groups were mapped out. For the 'medium' the team developed written materials which were translated into the main community languages; Bengali, Urdu, Polish and Roma.

Three Antenatal Care Champions were trained to run the community programme, who were either final year midwifery students or newly qualified midwives. In total, 46 sessions were held during the period when community-based initiative was conducted, which were a mixture of individual conversations and group meetings. These reached 514 members of the community.

One of the research midwives in the team said:

When I started, during the winter lockdown, I was very focused on undertaking a literature review, following that, I was holding workshops and conversations with stakeholders and service users as part of our co-production work. From a personal perspective as a midwife, it really enabled me to see that as a researcher I am able to understand women's experiences from a different vantage point, to that of being in a clinical role. It is exactly for this reason that we need midwifery researchers!

To understand how the programme was perceived by the community, the team asked members of the public who had taken part to complete a short questionnaire. They also held interviews and group discussions with others who had taken part. From this, it was found that the community programme was considered to be helpful, communicated in an appropriate manner, and helpful to women in starting health care early in pregnancy.

Implications for the future

To date, there has been very little research to find out what can be done at a community level to increase the numbers of women starting health care early in pregnancy, particularly among ethnically diverse communities. This project showed that a project aiming to change things was positively evaluated by the participants and was acceptable to the community.

Although Dr Puthussery has yet to assess the long-term impact of the programme in increasing the numbers of women (particularly women from ethnic minority backgrounds) starting their health care in pregnancy early, the initial findings suggest that project was of real benefit to women and families in Luton. It also has the potential to roll out in other areas to enhance women's access to antenatal care and give mothers and babies the best possible chance of a healthy pregnancy and beyond.

Most importantly, the project made sure that local women in Luton had a voice in their own care, and gave them the opportunity to act as champions in their communities to spread the word about the importance of attending antenatal care early.

Dr Puthussery is planning a national study to scale up this community-based initiative in other ethnically diverse socially disadvantaged areas in England in order to further understand in detail how the programme can help women start antenatal care on time

using a combination of approaches. She is currently in the process of developing a funding application to NIHR Health Services Research Programme

Thank you to the Burdett Trust for Nursing

The grant of £53,300 generously awarded to this project has had a positive impact on individual women who need antenatal care, helped research interventions that could help many more, and provided invaluable pilot data to help gain funding for a wider study.




For nearly ten years The Burdett Trust for Nursing has worked with Wellbeing of Women to champion the opportunity for nurses and midwives to enter the world of medical research and support their patients and their health institutions in a new way.

This has been achieved through two continuing research programmes: The Entry Level Scholarship and The Postdoctoral Research Fellowship such as Dr Puthussery's work. Without your commitment to developing the research skills of nurses and midwives, women's health would be less informed, less compassionate and less diverse.

More information

Please click here to read an article published by the team in Midwifery Magazine [Development, acceptability and feasibility of a community-based intervention to increase timely initiation of antenatal care in an area of high ethnic diversity and low socio-economic status in the UK - ScienceDirect](#)

Poster presentation presented at MBRRACE Saving Mothers Lives Conference (2022)

A community-based intervention to increase timely initiation and uptake of antenatal care

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Aim
To develop a community-based intervention in Luton which leads to increased numbers of women booking by 10 weeks

The Intervention


- Co-creation of a tailored community-based intervention, in collaboration with Luton and Dunstable NHS Trust and local service user
- Development of accompanying written materials in community languages
- Recruitment of volunteer Antenatal Care Champions
- Delivered the intervention to ~500 people through 1:1 conversations and groups sessions in:
 - Busy shopping areas
 - Gurdwara
 - Leisure centre
 - Nail bar
 - Luton Roma Trust
 - Community centres

Evaluation
Survey data and preliminary analysis of qualitative interview and focus groups show that those receiving the intervention perceived the verbal and written information given as part of the intervention as being valuable, and presented in an accessible way

"I think it will encourage girls to come get their first health check-up sooner... Because otherwise they probably wouldn't know."





"I was thinking to go in Romania and deliver the baby there because I didn't know the procedure here and how the system works, so now I feel more comfortable [in England]."



Background

- Ethnic minority women: ↑ risk of maternal morbidity and mortality
- Antenatal care ↓ risks of adverse maternal & neonatal outcomes and supports positive transition to motherhood
- Luton has high ethnic diversity and low socio-economic status
- 20% women book late in Luton, and this increases among women from ethnic minority backgrounds.**





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Conclusion

- Urgent need to identify interventions to increase timely initiation of antenatal care
- Early analysis suggests that a community-level intervention would contribute to timely booking

** Puthussery et al (2022) Disparities in the timing of antenatal care initiation and associated factors in an ethnically diverse maternal cohort with high levels of area deprivation. doi.org/10.1186/s12884-022-04984-6