

Review of neonatal assessment and practice in Black, Asian, and minority ethnic newborns

Lay Summary

July 2023

Lay summary

Overview

It is well known that ethnic inequalities impact on the care provided to women and babies. Evidence has shown that Black, Asian and minority ethnic mothers and babies are more likely to die compared to White mothers and babies. To make sure every baby has the best chance of survival and a good quality of life, we need to understand how current care practices are contributing to poorer outcomes for Black, Asian and minority ethnic babies. It is only by doing this that improvements to care can be made.

Until now, very little work has been done to see if the guidance for assessing a baby's condition after birth are suitable for Black, Asian or minority ethnic babies. This includes guidance for using the part of the Apgar score that looks at skin colour, or for assessing jaundice and cyanosis. These assessments are all based on White European babies, but they are used by healthcare professionals (such as midwives, doctors, health visitors or nurses) to care for all babies, regardless of their skin tone.

This report looks at three common assessments used on newborn babies. They all involve assessing a baby's skin colour:

- **Apgar scoring** – all babies receive this assessment in the first 10 minutes after they are born. This check is to assess how healthy a baby is, and if they might need medical support. A healthcare professional, usually a midwife, will assess the baby's: skin colour, heart rate, reflexes, muscle tone and breathing.

Each part is given a score between 0 and 2, with a maximum score of 10. A high score suggests the baby is doing well, but babies with a score below 7 might need medical help. The lower the score, the more help the baby might need.

To score skin colour '2' some guidance says that the baby's skin should be "pink all over".

- **Jaundice** - this is the name for yellowing of the skin and the whites of the eyes. It is caused by a build-up of a substance called bilirubin. Bilirubin is a chemical in the blood that is made when red blood cells are broken down. Babies are born with extra red blood cells that they no longer need. Jaundice is very common in newborn babies.

In most babies, their jaundice goes away without needing treatment. If it is identified early, it can be treated with phototherapy. These are special blue lights that help the baby to break down the bilirubin. Sometimes jaundice can be more serious if the level of bilirubin in the baby's blood gets too high. If jaundice is not treated, it can lead to longer-term problems like seizures (fits), learning difficulties and hearing problems.

It is important that serious cases of jaundice are identified and treated quickly to prevent longer-term problems.

- **Cyanosis** - this happens when a baby does not have enough oxygen in their blood. Cyanosis can be serious and needs to be treated quickly.

A common symptom of cyanosis is a change in skin colour, often described as the skin turning blue or grey.

What we did

We wanted to understand how Apgar assessments are made, and how jaundice and cyanosis is identified in practice, especially in Black, Asian and minority ethnic babies. To do this we collected data and information in a few different ways. This is called a mixed methods approach. The different ways we looked for information in this review were by:

- Finding research studies looking at any differences in how jaundice and cyanosis are detected in babies of different ethnicities or if there are differences in Apgar scores.
- Finding research studies looking at parents' and healthcare professionals' experiences of these assessments
- Looking at current clinical guidance and policies. These tell healthcare professionals how they should check for jaundice and cyanosis, and how they should do an Apgar score.
- Interviewing healthcare professionals and parents about their experiences of jaundice, cyanosis and Apgar scores.
- Interviewing with parents about how ethnicity and race affected the care they received.

We wanted to hear from parents and health care professionals who had varied backgrounds and different experiences of newborn care. It was important hear from a diverse group of people.

In total we spoke to 33 healthcare professionals, of these:

- 11 described themselves as Black, 3 as Mixed ethnicity, 2 as Asian and 17 as White.
- 13 were midwives, 9 were doctors or nurses that look after newborn babies, 3 were doctors who look after women who are having a baby and 8 were health visitors.

In total we spoke to 24 parents, of these:

- 15 described themselves as Black, 3 as Asian, 3 as Mixed ethnicity, 2 as Arab and 1 as White with a child of Mixed ethnicity
- 11 parents had been born in the UK, and 13 born outside of the UK.

What we found

1. Current guidance on how to assess newborn babies does not consider ethnicity and race.

Most current guidance did not say how a healthcare professional should assess a Black, Asian or minority ethnic baby differently to a White baby. This could be done, for example, by looking for colour changes in the eyes or in the skin around the lips.

This means some minority ethnic babies are not being assessed effectively. This can mean that cyanosis and jaundice are not detected or treated as quickly.

2. Healthcare professionals and parents did not think the current language used to describe skin colour or changes to skin colour are a good way to describe minority ethnic babies.

Many of the guidelines and policies used words like “pink”, “blue” or “pale” when describing a baby’s skin colour. They did not say how these colours might look different in minority ethnic babies.

In some cases, the language used was felt by some of the people taking part in the interviews to be offensive, as well as inaccurate.

3. Using medical devices to look for cyanosis and jaundice are more accurate than a healthcare professional looking at a baby.

Healthcare professionals will usually look at a baby for clues to see if they have jaundice or cyanosis. There are some medical devices which can test for these conditions more accurately and painlessly. This is true for all babies, but particularly for Black, Asian and minority ethnic babies.

Cyanosis can be detected using a **Pulse Oximeter**. This is a small medical device that shines red light onto the baby's skin to measure their oxygen levels. Jaundice can be detected using a **Bilirubinometer**. This is a small device which measures the level of jaundice in the skin. A blood test can also be done. Blood tests are the most accurate, but they are more painful for the baby, and it takes longer to get the results.

There is some evidence that these tests may be less effective when used on Black and minority ethnic people. However, they are still better at detecting cyanosis or jaundice than a healthcare professional looking for changes in skin colour.

4. There is not enough training for healthcare professionals, or parents, in how to spot jaundice or cyanosis in Black, Asian and minority ethnic babies.

Both healthcare professionals and parents should have access to materials which describe how these conditions look on different skin tones. These should include pictures.

5. Discrimination and racism exist in healthcare.

Many of the studies which looked at parent experiences identified the difficulties faced by Black, Asian and minority ethnic parents in accessing or receiving care for themselves or their babies. Parents interviewed as part of this study said the same thing. Key findings included:

Communication

For parents who needed interpretation, these services often did not exist, or were not good enough. Parents also said they felt dismissed, ignored or belittled by healthcare professionals. This could impact how confident they felt to raise concerns. Some parents said they felt silenced and others were worried about being labelled as difficult.

Discrimination

This included women being stereotyped as "aggressive" or "difficult" and healthcare professionals making assumptions about their bodies. For some this had an impact on their care, including not being given enough pain relief. Women also experienced microaggressions, such as their name not being said properly.

Poor care

Some women were left alone during labour and felt vulnerable or neglected. Many also felt that their dignity was not respected. Some healthcare professionals did not care for women in a way which respected their cultural needs.

Other factors

These included social isolation if they were not near their friends or family, living in poor housing, and facing racism in the area in which they lived or worked. For some, this made their mental health worse.

What needs to change:

To improve the care Black, Asian and minority ethnic babies, we recommend:

- 1. Medical devices should be used to detect jaundice and cyanosis.** They are much better at identifying these conditions than healthcare professionals looking for changes in skin colour. This is true for all babies, but particularly Black, Asian and minority ethnic babies.
- 2. Healthcare professionals and students need better training resources. They need to know what healthy skin looks on babies who are well, and how to see skin-colour changes in minority ethnic babies.** Training resources should include:
 - o Photos of what conditions like cyanosis, jaundice or rashes look like on Black, Asian, and minority ethnic babies.
 - o Black, Asian and minority ethnic babies should be represented in other training materials, such as dolls which are used to practice resuscitation.
- 3. Healthcare professionals and students need different types of training to help improve their skills in assessing Black, Asian and minority ethnic babies.** This should include:
 - o Training placements in areas with high ethnic diversity to help raise awareness, knowledge and confidence.
 - o Training on how jaundice is more common in some ethnicities.
 - o Training around anti-racist practice.
- 4. Parents should have information, which includes pictures of minority ethnic babies, to help them spot when their baby is unwell.**

Supplementary information

Apgar

Research papers

We found two big studies which looked at how many babies with low Apgar scores died. They found that lower Apgar scores meant it was more likely a baby would die in the first 28 days. This was true for all babies - no matter their ethnicity – and the impact of ethnicity on how many babies with low Apgar scores die was unclear.

Another study also found that midwives and student midwives said they had not been given enough training around differences that Black, Asian and minority ethnic babies may have, especially when assessing babies using the Apgar scores.

Interviews

We asked healthcare professionals and parents what they thought of the description of a healthy skin colour in the Apgar score being described as “pink all over.”

Most healthcare professionals, and over half the parents we interviewed, did not think this was a good way to describe a healthy skin colour for Black and minority ethnic babies. Some of the interviewees felt the current description was racist.

While many of the interviewees agreed that “pink all over” should not be used, there were lots of different views on how this could be described instead.

Some healthcare professionals also thought the whole Apgar score assessment needed to be reviewed, not just this part of it.

Jaundice

Research papers

The evidence was clear that using a small device, called bilirubinometer was much better at measuring jaundice compared to healthcare professionals looking at babies to see if they have jaundice. This was true for babies of all skin tones.

The evidence was less clear about what skin tones these devices work best on. Some studies found that they work better in Black, Asian, or minority ethnic

babies than White babies. Other studies have found they work better in White babies, and some studies have found no difference in how good they are at detecting jaundice between ethnicities.

Seven studies looked at the experiences of parents from Black or minority ethnic backgrounds of jaundice. Some themes included:

- Parents feeling their concerns were not taken seriously, or did not feel confident to raise concerns
- Parents who spoke another language did not always understand that their baby had jaundice because of poor translation
- Parents felt anxious about their baby having jaundice.

Interviews

Most parents knew that yellow skin was a sign of jaundice. Some healthcare professionals said they would look for jaundice in the whites of a baby's eyes or on their gums as this might make it easier to spot jaundice in Black, Asian and minority ethnic babies.

Most healthcare professionals thought spotting jaundice could be difficult, and that it is important to test for jaundice if a baby has any symptoms.

Cyanosis

Research papers

The studies showed that looking for blue skin, which is a sign of cyanosis, was difficult, especially in Black, Asian and minority ethnic babies.

The evidence was clear that using a small device called a pulse oximeter was much better at showing when a baby had low levels of oxygen in their blood, compared to healthcare professionals looking at the baby's skin colour to see if it was blue.

A very small difference has been seen between Black and White babies when using one of these devices. Inaccurate readings, which show high blood oxygen levels when these levels are actually low, are slightly more likely to occur when testing Black babies compared to White babies. However, using a device is still better than relying only on health professionals looking at the baby's skin. More research is needed on how these devices work on minority ethnic babies. However, using a device is still better than relying only on health professionals looking at the baby's skin.

Interviews

Both healthcare professionals and parents thought it would be difficult to see cyanosis in all babies, and that it would be harder to see in babies from minority ethnic backgrounds.



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