Learning from deaths

MBRRACE-UK
Mothers and Babies: Reducing Risk through Audits and Confidential Enquiries across the UK

When babies die at term as a result of something that happened during labour

Lay report 2017

The death of a baby due to problems in labour and birth at the end of pregnancy is very rare. These deaths make up 1 in 20 of all stillbirths and deaths of babies up to four weeks olds. While the rate of these deaths has more than halved in the past 25 years from 6 to just under 3 per 10,000 births, when labour-related deaths do happen, they should be considered serious incidents in healthcare, because many are potentially avoidable.

The aim of the confidential enquiries is to review the quality of care in a sample of deaths to identify if and where there are important gaps in care. It provides a picture of current challenges faced by maternity and neonatal units and an opportunity to improve services for women and families and prevent similar deaths in the future.

In 2015, 225 babies died as a result of something that happened during labour after 37 weeks' gestation. For this report, a representative sample of 78 of these deaths was selected. Of these, 40 were stillborn babies and 38 were babies born in poor condition and as a result died with 28 days of birth. The care both the babies and their mothers received during pregnancy, labour and afterwards were reviewed in detail against national guidelines, by a panel of experts, including midwives, obstetricians, neonatologists and pathologists.

First, the panels reviewed each part of the care pathway women and their babies experienced to understand where improvements in care are needed and might have saved the baby; good care was also identified. Panels then assessed the quality of care the mother received during each part of her care pathway after the baby had died, as this may affect her psychological wellbeing and any future pregnancies she may have.

Key findings – saving the baby

Panels found that in 8 out of 10 deaths different care might have saved the baby. This finding is against the backdrop of a growing number of women being cared for, who have risks of things going wrong in pregnancy and childbirth and the potential for resources to be stretched. In at least 1 in 4 deaths, the enquiry found there were problems with adequate staffing and resources to provide safe care.

Antenatal care

A baby who does not thrive during pregnancy is unlikely to do well during labour and birth. For half of deaths (around 6 out of 10 of stillbirths and 4 out of 10 of neonatal deaths) the panels found that there were missed opportunities to identify a baby who may need further monitoring or a different plan for birth. Some findings were the same as those of the 2014 confidential enquiries into term stillbirths before labour, including failure to follow national guidance on: baby's movements during pregnancy, monitoring the baby's growth, and identifying and managing diabetes. New findings included:

- 2 out of 3 women were not offered carbon monoxide testing, which will identify mothers who smoke and should lead to support to help them give up
- it wasn't documented that all women who'd had a caesarean section in a previous pregnancy had clear discussions around risks and the opportunity to make informed choices about whether to have a vaginal birth.

Care during labour

In 3 out of 4 deaths, panels found quality of care issues during labour and birth which may have led to the baby's death. Before labour was established, enquiries found there were problems with:

- delays in induction
- recognising when a woman had moved from the early (latent) stage of labour to established labour
- monitoring the baby's heart rate during both induction and the latent stage of labour.

Once labour was established:

- proper guidance wasn't always followed when professionals listened to the baby's heart rate using intermittent or continuous monitoring methods
- there were delays in making the decision to urgently deliver the baby in some instances.

Staff were not always able to stand back, see what was happening, take all the issues into account and respond appropriately. This was made more difficult because units were busy:

- in at least 1 in 5 deaths, lack of staff or resources in the delivery suite had an impact on safety.

Resuscitation and neonatal care

Resuscitation was attempted for 8 out of 10 of babies in this enquiry. In general this was done well but in a small number of cases there were problems with:

- confusion over the use of Newborn Life Support protocols
- poor record keeping
- lack of availability of senior staff when needed.

The vast majority of babies who were admitted to neonatal units received good care.

Key findings – better care for bereaved mothers

The care parents receive after the death of their baby has a profound effect on their short and long term wellbeing, both physical and psychological. Sensitive care will not take away the pain and shock of their baby's death but it may provide some comfort and play a part in parents' understanding of events, as well as support for a future pregnancy. Panels assessed the quality of care the mother received during each part of her care pathway after the baby had died and found that for half of mothers, care at some stage could have been better.

Mother's care in hospital after the baby had died

Good quality bereavement care is set out by Sands Guidelines as well as by local bereavement pathways. For 3 out of 4 mothers the quality of bereavement care was good or satisfactory. In cases where it didn't meet standards it was mostly for neonatal deaths where there was:

- lack of joint working between obstetric and neonatal teams
- an absence of checklists for bereavement care meaning that it was hard to assess quality.

Post-mortem - understanding why the baby died

Perinatal post-mortem is the clinical investigation to understand why a baby has died and all parents should be offered consent for post-mortem; in cases of neonatal death the coroner or Procurator Fiscal (in Scotland) may order a post-mortem. Even when there isn't a post-mortem, an investigation of the placenta, the baby's lifeline during pregnancy, should be undertaken as this may have vital information. While the majority of post-mortems in the enquiry were of good quality:

- 4 out of 10 placental investigations were poor or unsatisfactory

- 1 in 3 neonatal deaths had no form of post-mortem or placental investigation
- there wasn't evidence of written information about post-mortem being given to 3 out of 4 parents of babies who died shortly after birth.

Follow up in the community and consultant meeting

Follow-up care, when bereaved mothers go home, is an area where there's a significant lack of information and understanding about how women manage in the weeks and months after their baby's death. Guidance recommends mothers are offered visits by a community midwife and that all her primary carers are notified of the death of her baby. However:

- while there were examples of excellent follow-up care by community midwives, some women had no documented follow-up
- it was not clearly documented that all health care professionals in the community had been informed of the baby's death
- all parents should be offered an appointment to see their consultant to review their care and receive the results of any tests or investigations, including-post mortem. This is also a time when doctors may discuss a future pregnancy with parents. For 1 out of 3 parents there was no documented evidence this meeting took place
- for 2 out of 3 parents there was no documented evidence that they received a letter summing up this meeting. If letters were sent, half were good, the rest were either only adequate or poor. Some lacked sensitivity.

Reviewing the death to understand events and learn lessons

While a hospital review to investigate the death was done for 74 of the 78 deaths, and the majority were carried out by professionals representing different areas of care (multi-disciplinary), not all followed recommended standards for a Serious Incident Investigation. Panels found:

- many reviews were of poor quality and 9 out of 10 didn't consider all factors that may have contributed to the death
- only 1 in 10 reviews for babies who died shortly after birth included the perspective of a neonatologist
- only 2 reviews documented the input of a pathologist
- only 9 reviews included the perspective of a health care professional from outside the organisation. The aim of an independent reviewer is to give an objective view of the quality of care
- there was only documented evidence that the review considered views or questions from parents in 5 cases.

Standards of Perinatal Mortality Review

The group reviewing care should be multi-disciplinary. There must be active communication with parents and an offer to give their perspective of all aspects of care. The review should follow a structured process and reach as clear an understanding as possible about why the baby died. The aim of the review is also to maximise learning, reporting and actions to improve future care. Parents should receive a report of the findings in plain English. For more information go to: www.npeu.ox.ac.uk/pmrt

PMRT
Supporting high quality local perinatal reviews

When babies die at term as a result of something that happened during labour

1 in 20 stillbirths and deaths of babies within 4 weeks of birth is labour-related

In 80% of cases different care might have prevented the baby's death

In 1 in 4 deaths there were problems with adequate staffing and resources

What needs to be done to prevent future labour-related deaths

In at least a quarter of deaths there were problems with adequate staffing and resources to provide safe care	Adequate staffing and resources to support safe care, particularly on the delivery suite, needs to be addressed
Not all women with previous caesarean sections had clear discussions about their birth plan	Women with previous caesarean sections must have clear discussions about their birth plan so they can make informed decisions
There were problems recognising when a women moved from early to established labour	National guidance should be developed around managing the early stage of labour
Guidelines weren't followed when monitoring the baby's heart rate during labour, leading to delays when babies needed to be delivered urgently	Improvements in training for fetal monitoring and situational awareness are required for staff caring for women in labour
1 in 3 neonatal deaths had no post-mortem examination or placental histology	All families must be offered consent for post-mortem with written material provided to support their decision
9 out of 10 reviews of care didn't follow national guidance for serious incidents	Units should adopt the national Perinatal Mortality Review Tool and put aside time for training so that reviews can be carried out robustly

Messages from this enquiry for pregnant women

- You should be offered carbon monoxide testing at your first antenatal visit. Even if you're not a smoker, carbon monoxide is a poisonous gas that may exist in your household, from a leaky boiler for instance, and may be affecting your health without your knowledge.
- If you have had previous complications in a pregnancy or a caesarean section this will be taken into account and may affect your birth plan. Your midwife or hospital doctor should discuss these with you.
- In a singleton, as opposed to a twin or multiple pregnancy, midwives should measure your abdomen to assess your baby's growth each time you go for an antenatal check-up after 24 weeks. The measurements should be plotted on a graph that will show the baby's progress. Your midwife can explain the graph to you.
- Your baby's movements are a sign of their wellbeing and your midwife should discuss this with you as your pregnancy progresses. If your baby's movements change, slow down or stop, call your maternity unit straight away. If you have reached 26 weeks' gestation, your midwife should arrange to give you a full antenatal check-up.
- Unforeseen problems can arise at any time in pregnancy. Should you develop problems you should be part of any decision making about how your pathway of care may change as a result. Some women, for instance, may be at risk of developing pregnancy-related diabetes. If you do develop gestational diabetes you should be cared for in a joint antenatal and diabetes clinic.

More information about pregnancy risks can be found at NHS Choices: www.nhs.uk/conditions/pregnancy-and-baby; and Safer Pregnancy: www.saferpregnancy.org.uk

Messages for anyone supporting a woman and family whose baby has died

- All parents should be offered a post-mortem and be given written information about what it entails to support any discussion. A post-mortem may provide more information about why their baby has died and help them plan their future.
- If parents do not want a post-mortem, specialist pathologists should examine the placenta, as it may also provide important information.
- After discharge mothers should be offered on-going support from a midwife or health visitor. Health visitors and GPs should be notified of the death of their baby and any on-going investigations. Support in the community should be available for as long as parents want it.
- Events leading up to a baby's death should be reviewed by a multi-disciplinary group at the hospital to inform parents clearly about what happened. Parents should be told about the hospital review and given the opportunity to give their perspective or ask questions.
- Parents should be offered a follow-up appointment with a consultant obstetrician and/or neonatologist to discuss the conclusions of any review or post-mortem and to talk about a future pregnancy if they wish. This may be several months after the baby's death because of the complexity of information that needs to be gathered.

Support services for families whose baby has died at any stage of pregnancy and early life are available at: www.sands.org.uk/support-you/how-we-offer-support/useful-links-and-organisations

This lay report was written by Charlotte Bevan. Writing Group members included: Claire Storey (International Stillbirth Alliance), Maureen Treadwell (Birth Trauma Association), Jane Denton (Multiple Births Foundation), Helen Turier (TAMBA), Ann Chalmers (Child Bereavement UK), Jenny Chambers (ICP Support), Liz Thomas (AvMA); and Jo Dickens, Elizabeth Draper, Ian Gallimore, Sara Kenyon and Jenny Kurinczuk from MBRRACE-UK.

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