

Why Mothers Die 1997-1999

Summary of the latest report of the Confidential Enquiries into Maternal Deaths in the UK

Call for sensitive, flexible antenatal care

“Pregnancy is not always a safe and happy event and indicators that all is not well are being missed”

Jane* was overweight when she conceived, but she had a normal delivery at full term, and was able to go home the day after.

Ten days later however, she started to have back pain and was immobilised for a couple of weeks. Then she developed a severe chest pain, which her GP put down to aching muscles, even though she was obviously overweight, had suffered a period of immobilisation and had recently given birth.

That evening Jane decided to call her midwife because she felt clammy and was losing consciousness. Her heart was racing. The midwife promptly sent her to her local accident and emergency (A&E) department where staff failed to realise how mortally ill she was. She died shortly afterwards as a result of a massive blood clot.

Jane’s sad story is one of a number of case studies highlighted in *Why Mothers Die 1997-1999* – the latest report of the Confidential Enquiries into Maternal Deaths in the UK.

Over the three years covered by the report, 378 women died during or up to one year after pregnancy out of more than two million maternities in the UK.

Some of the deaths occurred despite “exemplary care”, but others may have been avoided by more careful pregnancy management and attention to detail.

The worrying truth is that the deaths represent the tip of the iceberg of similar medical problems experienced by thousands of other mothers who survive, but who may suffer long-term physical or psychological problems.

Director and editor of the report Dr Gwyneth Lewis said: “Fortunately, maternal deaths are rare in this country. Of the 600,000 maternal deaths across the globe, less than one per cent occur in developed countries, but that does not mean we can allow complacency.

“The past reports have looked at the leading obstetric causes of death and have majored on things that go wrong during pregnancy, delivery or the post-partum period (after the birth of the



Dr Gwyneth Lewis, editor of the *Why Mothers Die 1997-1999* report

child). But now we are identifying a huge raft of other factors that GPs and other primary care professionals can influence and this supplement is designed to help them in that task.

“Of major concern is the finding that vulnerable women from the lowest socio-economic groups may be up to 20 times more likely to suffer a maternal death than more advantaged women. Up to 30 per cent of these women found it difficult to attend for antenatal care.”

Indeed, as the majority of antenatal care is delivered in the community, GPs, midwives and health visitors are the ones at the frontline when it comes to spotting potential problems in pregnant and recently-delivered women.

They are also the ones who should help identify disadvantaged and vulnerable women and set up follow-up procedures for women who regularly fail to attend for antenatal care and

encourage them to book early.

They can organise careful management right from the start of pregnancy for women with a history of serious mental illness or underlying medical problems such as diabetes and epilepsy. They can also initiate local support strategies for women who disclose domestic violence. They have the ability to directly refer women they are concerned about to hospital services.

Paying closer attention to women like Jane, who complain of chest or leg pains during or after pregnancy and giving consideration to the presence of blood clots, could save lives. Pregnant and recently-delivered women are at far higher risk of blood clots.

Not prescribing the oral contraceptive pill to obese women could stop women dying from blood clots months after giving birth when they are no longer in touch with maternity or obstetric health professionals.

Noticing a small rise in blood pressure or protein in urine could prevent deaths from hypertensive disease.

Similarly being aware that diarrhoea, vomiting and abdominal pain in any woman of reproductive age, including teenage girls, could be signs of an ectopic pregnancy, could avert tragedy.

As well as highlighting problems however, the report also illuminates success.

It points to great improvements over the years in the safety of obstetric anaesthesia and the treatment of hypertensive disease.

And a major recommendation in the last report – that all women undergoing caesarean section should receive treatment against blood clots – has also led to a “gratifying” reduction in deaths in this area.

Lewis said: “There are reasons for professional pride. It is a huge achievement, for example, that only seven women died of haemorrhage out of more than two million pregnancies.

“But pregnancy is not always a safe and happy event and indicators that all is not well are still being missed.

“Staff need to make themselves familiar with the report findings and recommendations and use the report as a marker for providing sensitive, flexible antenatal care, which should not only help reduce the maternal mortality rate, but also improve the quality of care for pregnant and recently delivered women and their babies.”

Collective expertise essential to keep pregnancy as safe as possible

“Keeping pregnancy safe in this country is very much a team effort that includes GPs, midwives, health visitors, hospitals and the women themselves,” said the maternal mortality report’s clinical director Professor James Drife.

“The evidence is that we are doing better as a team. We should be encouraged to do better still.

“At the end of the day every one of these deaths is an individual tragedy and if we can save one life by reading and acting on a supplement like this, that is a really worthwhile achievement.”

GPs are always on the frontline and are likely to be the first call for women who are pregnant. They need to be on the ball because most problems are likely to present themselves first in primary care.

Dr Amit Bhargava is a practising GP in Crawley and GP adviser to the Department of Health.

He said: “We can especially influence the reduction of deaths because of our unique knowledge of our patients – their history of domestic violence, disadvantaged background and mental illness, for example.

“It’s also true that for every woman who dies, there is a much larger number who suffer from similar problems. We should be able to identify these women to improve care across the board.

“There are areas where we may be able to identify potential problems but may not have the resources to make a difference, in which case other agencies need to take on the further care.”

Bhargava believes the report underlines the need for the early development of a common health record, electronic patient record and an updated antenatal record that includes, for example, a space to record previous mental illness and a confidential mechanism of identifying disclosed domestic violence.

‘We have to be up front with our care to make sure we recognise potential problems early’



Taking time to talk: midwife Jenny Hugman with young mums in Milton Keynes

“Various professional bodies that look after the pregnant woman must put their collective expertise behind this report,” he said.

“It’s also important that the process of data collection, referral guidelines and audit is simple and usable to enable health professionals to deliver on the recommendations.”

Local Supervising Authority (LSA) midwifery officer for the south east, Sue Sauter, is responsible for ensuring midwives in her region are practising effectively and are implementing

the report’s recommendations.

She said: “We have to learn our lessons and continually strive to improve our service. The reports act as useful educational tools to be shared with all midwives and other health professionals.”

In the latest report, one of the key messages picked up by Sauter – president of the Association of Supervisors of Midwives – was the continuing failure generally to follow up on non-attenders.

“This is such an important area,” she said. “In the south east, most units have a stringent system for follow ups of people who do not

attend. The midwife will go to the house and, if the woman is not in, she will leave a note through the door with the next appointment on. If the woman still fails to attend, the midwife will return to the house and will not be satisfied until she has made direct contact with the woman.

“In most cases the woman is very busy and hasn’t fully realised the importance of antenatal care. In other cases women may be experiencing financial or childcare difficulties which prevent them attending their appointments. Either way the midwife, by working with other agencies, can help to provide support which will enable the women to have antenatal care.

“And if there are serious problems it means they are flagged up quickly so that appropriate action can be taken to help women sooner rather than later.”

Senior health visitor with Milton Keynes Primary Care Trust, Jenny Hugman, believes such pro-active approach work should be matter-of-course for all midwives, health visitors and GPs.

“We have to be up front with our care to make sure that we recognise potential problems early.

“It’s a lot safer and more effective to work out the possibilities and plan for them beforehand than to wait until a problem arises. It gives the woman herself good reassurance that difficulties can be overcome.”

Pregnant women travelling by air
GPs should advise all pregnant women to take the following precautions when travelling by air:

- do isometric calf exercises
- walk around the cabin where possible
- avoid dehydration by drinking plenty of water/juices/soft drinks and minimise alcohol and caffeine intake
- wear properly fitting elastic compression stockings
- take low-dose aspirin if diagnosed as being at increased risk of thrombosis.

Case studies

Identifying disadvantaged women

It was a freezing cold night when they found Karen* dying from hypothermia in someone’s front garden.

The homeless 13-year-old, in care of social services, had been living in the open under a duvet since being discharged from hospital.

After running away from home following abuse, she had suffered a miscarriage and a subsequent operation to evacuate her uterus of retained products had been complicated by perforation of the uterus. She died shortly after re-admission to hospital.

No specific cause of death was determined for the underage girl, who was also a regular injecting drug user, but pathological opinion inclines towards an accidental overdose of morphine.

Had hospital staff given more consideration to her future care when she was discharged and had there been proper social service support for this vulnerable child, she might still be alive today.

Karen’s story underlines the need to consider each individual woman’s particular needs rather than adhering without thought to usual discharge routines.

Ectopic pregnancy

Eve* complained to her GPs on successive days about abdominal pain. Her period was delayed and a pregnancy test proved positive. Eventually the GP arranged for an ultrasound scan but before it could be carried out the pain recurred with diarrhoea. She was also pale, sweaty and had low blood pressure. An ambulance was called, but Eve had a cardiac arrest on the way to hospital and her heart stopped for a prolonged period.

She was resuscitated in A&E and taken to the operating theatre where three litres of

blood were found in her abdomen from a ruptured tubal pregnancy.

Eve had suffered major brain damage as a result of her heart stopping and she later died in the intensive care unit.

Spotting ectopic pregnancies almost entirely rests with GPs. They need to be alert to the fact that some symptoms of ectopic pregnancy, such as abdominal pain and diarrhoea, mimic gastrointestinal or urinary tract disease.

Dipstick pregnancy tests should always be carried in any woman of reproductive age with unexplained abdominal pain and, if positive, there should be immediate referral for ultrasound and a gynaecologist.

Sepsis

Anne* was three months pregnant when she was admitted to hospital after a short history of vomiting and pain in her lower abdomen – symptoms her GP had misdiagnosed as a urinary infection.

An ultrasound scan confirmed her baby had died and suction evacuation of the uterus was carried out but, because of profuse bleeding, a hysterectomy was also necessary. At the end of the operation Anne had a heart attack and had to be resuscitated.

She later died of a second heart attack in intensive care. Tissue and cell samples from her uterus strongly suggested a violent streptococcus bacteria infection.

All doctors and midwives need to be aware that the onset of life-threatening sepsis at any stage of pregnancy can be insidious.

They need to know the symptoms and signs and be prepared to institute immediate treatment, including antibiotics before diagnosis is confirmed, to avoid serious consequences.

Report flags language problems as being a significant barrier to high quality health care

Inequalities in health and social justice are still a major indirect cause of maternal deaths in this country and women from ethnic groups other than white are, on average, twice as likely to die than white women.

The maternal mortality report points to language problems as being a significant barrier to high quality care.

Many of those who died did not speak English and a number relied on their children to translate, often inhibiting them in seeking help for intimate concerns and even resulting in information being incorrectly conveyed.

Others, the victims of domestic violence, found

themselves relying on their partners for translation, making it difficult for them to ask for advice or help.

Separate surveys of booking patterns have also revealed that women from non-English speaking ethnic minority groups are more likely to book late for antenatal care and, possibly, because of different social, physical and emotional needs, are poor attenders at clinics.

The report calls for more flexible patient-centred antenatal care, including outreach services, developed with the involvement of women who might have accessing difficulties.

It says health professionals need to overcome

personal, social and even inherent organisational racial prejudices and work to understand a woman’s social and cultural background.

And, vitally important, interpreters must be provided rather than relying on the woman’s friends and family to translate for her.

In Milton Keynes, the single biggest user of the Community Language Service is the primary care trust, which covers the cost of translators and interpreters for all health centres and GPs surgeries.

It has about 80 freelance interpreters/translators, all of whom are trained, cleared by police and bound by a confidentiality agreement.

More than 45 languages are covered and, since

the service’s inception in 1997, demand has grown from 18 assignments a month to 120.

Senior health visitor Jenny Hugman said: “One of our health visitors noticed that many of our Asian women didn’t access the full range of services available for them, so we have done a lot of work to try to make things more comfortable for them.

“Some surgeries and health centres had been reluctant to bear the costs of translators, but now the costs are covered by the PCT, interpreters are being booked wherever necessary.

“We have also developed a unique mums and toddlers project at the Wolverton Health Centre

where non-English speaking mothers can get together with health professionals to tackle ante and post natal problems, with interpreters provided for all their sessions.

“This has been an immense success and has led to a women’s support group starting up and a series of women’s skills days being organised – all of which are helping empower Asian women to make full use of services on offer.”

Another problem highlighted by the report is late access to care by immigrants and refugees pregnant on arrival in the UK.

Hugman said: “With refugee women one of the difficulties is that you often don’t know they

are pregnant until they start to show. We therefore work hard to build good relationships with all staff working with refugees, so that they can let us know as soon as possible when a woman is pregnant and we can get her into antenatal care.

“It can be a very frightening experience for, say, a Somali woman coming into this country and finding she is pregnant. The sooner we can allay her fears and help her to the kind of care she wants and needs, the better for her and for other mothers, who will see that she has been well looked after and will feel more confident to come to us.”

The case for assessing women with history of mental illness

The writing was on the wall when Judith* became pregnant for the third time.

Within days of giving birth to a previous child she had suffered serious mental illness and had been admitted to hospital for treatment.

Because of this history the midwife referred her to a psychiatrist who prescribed antidepressants to take at the first hint of illness after delivery and gave her an open appointment with psychiatric services.

In the event Judith became ill with the same symptoms on the same day after delivery as she had done previously. She killed herself, by jumping from a height, on the same day after delivery that she had been admitted to hospital on the previous occasion.

Judith was a woman at high risk of psychotic illness. Antidepressants were unlikely to prevent its onset.

'Women who have had a severe mental illness after a previous pregnancy are at a one-in-two risk of recurrence'

She was also losing contact with reality. Offering her an open 'drop-in' appointment was not a realistic way of ensuring care.

Frequent monitoring at her home by a community psychiatric nurse, especially at the likely time of onset of illness, could have prevented this tragic outcome.

The maternal mortality reports reveal that of the 378 maternal deaths recorded between the years 1997 to 1999, 42 were caused by, or linked with, psychiatric illness.

A separate study linking the names of all women who had died with the names of all women who gave birth in the three-year period also suggests that deaths from suicide as a result of perinatal mental illness may well be the leading cause of maternal death overall.

Dr Margaret Oates, author of the report's chapter *Deaths from Psychiatric Causes*, said:

"Women who have a past history of serious mental illness are running a one-in-two to one-in-three risk of becoming seriously ill following delivery.

"The key word is 'serious', meaning women who were severely depressed or psychotic. Women who have had milder forms of post natal depression can usually get the support and help they need in primary care.

"A problem is many health professionals are using 'PND' as a general term to cover all types of psychiatric illness. This can result in everybody being treated in the same way.

"Half of the women who died might have



Learning to listen: Sandra Elliott says her trial service is highlighting the need for better links between midwives, obstetricians and mental health services

Good practice in assessment

A three-year trial perinatal mental health service at Guy's and St Thomas NHS Trust in London is bringing hospital and community-based health professionals together in the detection and management of mental health and substance misuse problems for pregnant and post-natal women and their families.

The service aims to provide stronger community and primary care to better identify women in need as well as community-based services that are easy for them to access and are not seen as stigmatising.

All obstetric and midwifery staff are being specially trained to detect mental health problems, keep in frequent contact with women, and refer individual cases to regular multi-professional multi-agency meetings so that appropriate care plans can be drawn up.

Leading researcher and practitioner in

perinatal mental health Dr Sandra Elliott is advising the project group.

She said: "It's still early days, but what the service is highlighting is the need for better links between midwives, obstetricians and mental health services.

"It's also underlining the inherent difficulties experienced by midwives in asking women awkward questions about previous mental illness.

"We need to help health professionals communicate effectively with women and tell them why they are being asked such questions. This reassures them nothing bad is going to happen as a result of their answers, but what they say will help us to provide a care plan that supports them through pregnancy and child birth and ensures immediate appropriate treatment if a mental health problem develops."

been helped if the severity of their previous problem had been picked up at antenatal clinic and they had been seen on a frequent basis after the birth."

The report calls for health professionals to ensure women with a history of serious mental illness are assessed by a psychiatrist in the antenatal period, with a management plan prepared for their care before and after delivery.

The way an individual was treated previously is a proxy indicator of severity. For example, if a woman was previously admitted to a psychiatric unit, the probability is that she will have suffered from a serious mental illness. She faces a high risk of recurrence following delivery.

Health professionals also need to be alert to the fact that mental illness can start rapidly in the first two weeks after delivery. A woman can

appear fine one day and be very ill the next – all of which can happen between visits.

Oates said: "Care of women with post natal depression has been improved beyond recognition over the last 20 years, but there has not been a parallel improvement in the treatment of serious mental illness.

"The evidence is that we have increased detection of depression, but we need to learn vital lessons if that detection is to be matched by improved outcomes for patients."

Pdf files of the report and the executive summary and key recommendations are available on www.cemd.org.uk The full report can be purchased from the RCOG bookshop on 0207772 6275, or through the on-line bookshop at www.rcog.org.uk