AIMS For a better birth...

Maternal Deaths - RCOG Takes Over Publishing

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As the publication of the CESDI report switches from the Department of Health to the Royal College of Obstetricians and Gynaecologists, AIMS' Research Officer Jean Robinson reviews the latest figures on maternal deaths.

For the first time the Confidential Enquiry into Maternal Deaths (CESDI, which has been going for 50 years) is published not by the Department of Health and her Majesty's Stationery Office, but by the Royal College of Obstetricians and Gynaecologists. Awkward consumer groups tend to notice things like that - and it doesn't look good. It's not the privatisation and any potential profits we worry about, but the idea that the most powerful of the groups whose inadequacies the Enquiry is supposed to identify, is publishing the data.

The Enquiries no longer come under the auspices of the Department of Health but are under NICE (The National Institute of Clinical Excellence). Clearly we are going to have to watch them more closely. This was a decision taken without consumer consultation, and it does not encourage confidence.

The Missing Data

The latest report, like all its predecessors and the CESDI reports (stillbirths and deaths in infancy) has the same major flaw we have continually criticised: enquiries are based solely on the case notes and reports from the professionals involved. There is no voice for the surviving family, whose account of events may be very different, as we know all too well.

Another gap is that this report provides only overall statistics for the UK. We no longer get separate figures for each region or even separate countries like Wales and Scotland, which we used to have. In the 1991-3 report, for example, we learned there were 45 direct maternal deaths in the West Midlands, 14 in Wessex, 38 in Scotland and so on. We understand that with small numbers Data Protection legislation does not allow it. We think that's a pity.

Benefits of The Study

That being said, we are grateful for what the Enquiries do provide. Each chapter has a protocol for reduction of future risks. Risks highlighted in previous reports (like blood clots and sepsis after caesareans) have been reduced. We know from our contacts with consumer groups in Europe and elsewhere that they envy what we have. At a recent symposium on maternal deaths at the RCOG, I was delighted to have the chance to thank all the participants on behalf of consumers.

Higher Mortality or Better Statistics?

This report is based on a new computer programme that identifies deaths that would previously have been missed; it has picked up an extra 40 deaths. This gives a total of 348 deaths over the three years covered by the report - a rate of 17.8 per 100,000 births. This is higher than the rate of 13.7 six years ago, but it is likely to be because more cases are now being identified. Another benefit of the new system is that cases where women had private care are more likely to be picked up (three women had had private antenatal care).

In all, 106 were "direct" deaths - caused by pregnancy or birth; 136 were "indirect" - caused by another disease that was aggravated by pregnancy; 29 were "coincidental" unrelated to pregnancy. Maternal deaths, internationally, are those that happen up to six weeks after a birth. In addition the UK identifies "late deaths" (up to a year after delivery). There were 107 of these, which could also be direct, indirect, or coincidental .

Table: Causes of Death

The most common direct causes of death were:	
Thromboembolism	35 (greatly reduced from 48 in the previous report)
Hypertensive disease	15 (down from 20 last time)
Early pregnancy deaths	17 (13 ectopic pregnancies, 2 after abortions)
Sepsis	14
Indirect deaths:	
Cardiac	35
Psychiatric	43

Substandard Care

Half the women who died had seriously substandard care - 80 per cent of hypertension cases, 71 per cent of haemorrhage cases, 65 per cent of early pregnancy cases and 57 per cent of thrombosis cases had substandard care. For indirect deaths, 17 per cent had substandard care but it was 39 per cent in psychiatric cases.

Major causes of substandard care were: poor liaison between professions (42 per cent) failure to

appreciate the severity of the case (39 per cent), wrong diagnosis (38 per cent) incorrect treatment (38 per cent) failure of GPs to refer cases to hospital (21 per cent), senior doctor did not attend but gave phone advice (13 per cent), the intensive care unit was full (6 per cent) or too far away (6 per cent) and lack of blood products (6 per cent).

Risks of Age, Social Class

Five schoolgirls died, aged 16 or under. Four had been in the care of social services but three were living rough when they died. Altogether there were 114 teenagers under 18. All but one were socially excluded. Half had suffered domestic violence and/or sexual abuse.

After the age of 25, risk of maternal death rose, almost doubling after the age of 35 and rising even more after the age of 40. Risks also rose with number of births, particularly for those with more than four children. Mothers expecting twins or triplets almost doubled their risk of maternal death. Women with IVF pregnancies seem to have four times the normal rate of maternal death, but numbers are too small to be sure.

Up to now, we have never had adequate analysis of risks by social status. For the first time we are able to see that women in the most disadvantages groups are about twenty times more likely to die than those in the highest two groups. Non-white women have a doubled risk (many did not speak English) and travellers had a very high risk (we don't know how high because the number of travellers and their births is not known).

AIMS Comment

The good news about this report is that it is much more socially aware than previous reports and shows genuine concern for the poor, the disenfranchised, and ethnic minorities - and it doesn't sound like lip-service. The report shows, once again, that women booking late for ante-natal-natal care are also those who have an increased risk of dying. The report says their views should be sought to help in providing more "appropriate" services. We agree, but not by one of the superficial and inadequate questionnaires we have seen in the past. We need empathetic, bottom up, qualitative research, which the women themselves help to design and run.

We applaud the recommendations that antenatal services should be flexible enough to meet the needs of all women and that health professionals should act as advocates and overcome their own personal and social prejudices. We look forward to quoting these on behalf of our client.

Thrombosis

Blood clots are the leading cause of direct maternal death; 57 per cent had substandard care. The number (31) has come down from the exceptionally high number in the last report (46) because caesarean deaths have been reduced following recommendations for prevention. There were only 4 thrombotic deaths after caesareans compared with 15 in the last report. This is almost certainly because

warnings in the last report about the need to give high-risk patients heparin and leg stockings have been heeded. One of the fatal caesareans was done on an obese woman for breech presentation: the report points out that she had not been offered external cephalic version (turning the baby round) so that she could have a vaginal delivery. Deaths after vaginal births have not come down (10), nor have deaths in pregnancy (123). All but one of the vaginal delivery deaths were in women with known risk factors, particularly obesity.

What is worrying is the sustained rise in thrombosis deaths after vaginal delivery. There used to be 3 or 4 in each three-year report. For the last two reports there have been 10, despite the declining percentage of vaginal births. The women died 7-40 days after giving birth. Seven of them were overweight.

Two pregnant women died after long air journeys at 25 and 36 weeks, and there is a list of recommended precautions. Two women died after taken oral contraceptives within two months of delivery: both were obese.

The failure of GPs and hospital doctors to suspect thrombosis was a common problem. One woman saw three GPs before it was diagnosed. The report emphasises that chest X-rays can and should be given in pregnancy if pulmonary embolism is suspected.

AIMS Comment

We are pleased that again they have drawn attention to the postnatal risks of the Pill, but what about risks in early pregnancy? Seven of the women who died in pregnancy were only 8 weeks pregnant and one was 10 weeks. Sometimes women continue taking the Pill not knowing they are pregnant.

Hypertensive Disease

The good news is that deaths from pre-eclampsia and eclampsia are down to an all time low of 15 - women over 35, and women with multiple pregnancies, being at greater risk. The bad news is that 80 per cent of the women had substandard care, and there were avoidable deaths, e.g. "The care of this patient was seriously substandard in many respects: failure to recognize the serious nature of her condition, slow and ineffective treatment, inadequate monitoring and absence of senior obstetric input".

Brain haemorrhage (caused by high blood pressure) was the largest single cause of death in this group. One important point is that automated blood pressure equipment can give grossly under-estimated readings. One woman with pre-eclampsia was put in a side ward, unobserved, and found dead on the floor. Sometimes women were admitted because they were at risk but there were delays in delivery. Sometimes there were delays in transfer to intensive care (which could be at another hospital).

There are strong criticisms of doctors who failed to provide information to the Enquiry: "Such a lack of documentation provided by the clinicians caring for this woman is manifestly and deeply unsatisfactory"..."The obstetricians concerned have failed, despite repeated requests, to provide the Enquiry with anything more than minimal information".

AIMS Comment

Some of the scenarios are all too familiar from our file of "near misses": the women who don't get the urgent section because theatre is busy (possibly doing unnecessary sections?) and GPs who simply prescribe paracetamol for pregnant women with severe headaches without checking blood pressure.

Haemorrhage

Deaths from this cause are down to seven compared with 12 in the last report. Three were due to placenta praevia, one to postpartum haemorrhage and three to abruption of the placenta. In one of the abruption deaths there was a history of domestic violence and the woman had bruises on her abdomen. Care was rated "very poor" in some cases and some hospitals were not adequately equipped to deal with such emergencies. Women known to be at risk were operated on by junior, instead of senior, staff.

Some women died despite emergency hysterectomies to stop the bleeding.

The report recommends all women at risk (e.g. placenta praevia) should give birth in a consultant unit with an on-site blood bank, and every unit should have a haemorrhage protocol.

AIMS Comment

Since previous caesarean increases the risk of both placenta praevia and haemorrhage, there is clearly now a large population who have been placed at risk by the rising section rate. Consumers have been aware of this all the time: doctors are just beginning to admit it. We think the investigation of maternal deaths where previous caesarean was involved should always include the necessity of the previous section or sections. The comment this time on one woman who had "a number" of previous caesareans does mention that the first was "for strong fetal indications" but the others were "elective". She had placenta praevia and haemorrhaged and despite having a hysterectomy and expert care she could not be saved. We believe all childbirth hysterectomies (which are increasing) should be notifiable and investigated, so that we can learn lessons from nonfatal cases.

Amniotic Fluid Embolism

Deaths have come down to eight compared with 17 in the previous three-year period. It is caused by amniotic fluid getting into the mother's circulation, the woman usually collapses suddenly and it is unlikely she can be saved. It is a condition which doctors still have no clear idea how to prevent or treat. However induction or speeding up of labour resulting in intense and frequent contractions seems to be a risk factor. Of the eight women who died, five had been induced or augmented - one with rupture of

membranes and the others with oxytocin. Only one woman (who had had a previous section) died in "normal" labour. Two died before labour. Being over 25 is also a risk factor, and today there are more older mothers.

The report recommends that rates of obstetric intervention like amniocentesis, induction and augmentation should be kept as low as possible.

AIMS Comment

Did those five labours really need to be induced or speeded up? Once again, if intervention is implicated, the necessity for it should be included in the Confidential Enquiry. We are also concerned about the stories we get about midwives providing hospital-style births at home (since they don't know any other kind) who will insist on artificially rupturing membranes. This can cause strong and rapid contractions that are a risk for amniotic fluid embolism, and we have many stories from women whose labours "went haywire" after it was done. This "simple" intervention is not without risk.

Early Pregnancy Deaths

Of the 17 deaths in this section, 13 were from ectopic pregnancy, a diagnosis that is still missed by both GPs and doctors in accident and emergency, despite the fact that a highly effective dipstick test for urine to identify pregnancy is available.

One of the saddest stories in the book is about a "very young" teenager who had run away from home following abuse. Like four of the five child-mothers who died under the age of 16, she was supposed to be in the care of social services, and three of them were homeless and living rough. She had an evacuation of the uterus following miscarriage during which her uterus was perforated. No arrangements were made for shelter after her discharge. She was found suffering from hypothermia in a front garden on a freezing cold night after living in the open under a duvet.

AIMS Comment

The tragic death of the child who became pregnant was only one of several cases of girls who were supposed to be in the care of social services. We hope reports will be sent to the social service authorities.

Deaths from ectopic pregnancy are not falling and there are thought to be 32,000 such pregnancies a year, all of them threatening the mother's life, as well as her fertility. The report warns about untypical presentations, like diarrhoea and vomiting.

Sepsis

There were 14 deaths from genital tract sepsis and four other deaths in which it played a significant part. The number has not come down for 10 years. Seven women had substandard care.

The six women who died in early pregnancy all got sepsis after medical procedures: amniocentesis,

removal of the placenta or retained products after miscarriage, laparotomy, and cervical cerclage. Those who died after 24 weeks had dev eloped fatal infections without intervention, or after spontaneous rupture of membranes. Two died after vaginal births: one had had ruptured membranes for three days, the other had retained products after a vacuum extraction. One died after caesarean (having adherent placenta after a previous section).

There were also two late deaths - one from toxic shock syndrome from a tampon.

AIMS Comment

The report stresses what we know from our callers: the onset of infection can be insidious. They say, "All doctors and midwives must be aware of symptoms". Some of our stories suggest that for a long time professionals actually deny the possibility, and refuse to see and act on what is in front of them.

Anaesthesia

Three deaths were caused by poor anaesthetic care. One woman got a high block from an epidural, which led to breathing difficulty and cardiac arrest. The oxytocin she was given fatally lowered her blood pressure. Two caesarean patients with multiple problems died after general anaesthetics. Anaesthesia problems were also involved in a number of other deaths.

One of the main problems was obstetricians failing to consult anaesthetists in advance of planned surgery on high-risk patients (including those at risk of haemorrhage from placenta praevia) so that senior anaesthetists were present.

AIMS Comment

Yet again, junior staff coping with serious situations that needed a consultant - the recurring theme of the Confidential Enquiries. There is also a strong warning about the dangers of giving oxytocin when there are heart problems, especially with too large a dose, too rapidly. And yet again, automated blood pressure equipment gave misleading results when the blood pressure sank to a fatal level.

Indirect Deaths

Heart disease is a major cause of maternal death and killed 35 women in this report - as many as were killed by thromboembolism. Some women had known conditions that made their pregnancies risky. Those with pulmonary vascular disease have a 30-50 per cent risk of dying. Some of these women were from ethnic minorities. Information about risk, and the way it is conveyed is stressed in this report, as it was in the previous one. As the report points out "counselling should not alienate the woman to such an extent that she does not come for antenatal care if she does become pregnant". However, the report acknowledges there can be strong cultural pressures to bear children.

Most heart disease deaths are from acquired heart disease, including puerperal cardiomyopathy, which can occur during the month before or the month after delivery

The report stresses that oxytocin to prevent post-partum haemorrhage should be used with great care in women with severe heart disease and is can cause a fall in blood pressure

AIMS Comment

The mystery is the dramatic rise in deaths from acquired heart disease which happened from 1991 on, when deaths went up from four to 20 per three years, and they have stayed at that level ever since.

Psychiatric Deaths

Because of new ways of collecting data, we now know that suicide is not only the leading cause of Indirect maternal death, but also the leading cause of maternal death overall.
There were 28 reported deaths in this enquiry but new studies are picking up many more deaths that were not reported. In addition there were six deaths from drugs overdose and six other deaths.

The women who committed suicide showed a different social class pattern from the other maternal deaths. They were usually in comfortable social circumstances, some had professional qualifications and some were healthcare professionals. Yet 24 of the 27 deaths used violent methods to kill themselves - only three died of overdoses. This pattern is unusual for female suicides.

Not one of the women who died had been admitted to a specialist mother and baby unit, and none of them had been managed by a specialist perinatal mental health team.

Women with a previous history of post-partum psychosis have a one-in-two or one-in three chance of it happening in another pregnancy. Some of these women simply had "postnatal depression" on their medical history instead of "psychosis" which could have alerted staff to the risk. One actually killed herself by jumping from the maternity unit.

Two women who killed themselves feared they might have their children taken by social services. One woman died from side effects of an anti-psychotic drug she was given (haloperidol).

Some women and their families had avoided psychiatric care. The report suggests that a mother and baby unit would have made such care more acceptable.

AIMS Comment

We are delighted that, since the last report, there is now a whole chapter on psychiatric deaths and the scale of the problem is at last being identified. We have been writing to the Department of Health about this for years. Unfortunately the deaths will still be underestimated because they only count within a year of the birth, and we know of women at risk much later than that, particularly those with post traumatic stress disorder. The report mentions depression, psychosis and obsessive-compulsive

disorder, but does not mention PTSD, which we know to be a major cause of postnatal illness. Following a paper I gave at the RCOG recently, we hope this will now be on the map.

We can understand why they suggest midwives taking psychiatric histories - especially so that women at risk of another psychosis can be watched. But we are worried about having psychiatric histories on case notes because we - and our clients - know that it can have
damaging effects on care in labour and afterwards. And anything the woman says (especially acomplaint) will be downgraded and disbelieved. One of our clients with a past history of alcoholism that she had battled successfully attributes her bad treatment - resulting in PTSD - to the reference to alcoholism on her notes.

The shortage of places in mother and baby units and lack of specialist teams is scandalous, and we hope this report will trigger improvements.

Domestic Violence

Murder by partners or close relatives caused eight maternal deaths, and most of the schoolgirl mothers had suffered violence at home, and two other deaths were probably the result of violence. One of the haemorrhage deaths was a woman covered in fresh bruises (including the abdomen) whose partner said she "bruised easily". The hospital had not provided a private place where they could ask the woman without her partner present. Twelve per cent of the women who died had reported a history of domestic violence - which must be an underestimate.

Lack of liaison from health and social services figures in a number of cases.

AIMS Comment

Because women suffering from domestic violence are also likely to be poor antenatal clinic attenders, and discharge themselves from hospital (perhaps to protect their children), and they are also more likely to drink or taking drugs, it is their "fecklessness" which is labelled on the case notes, rather than primary causes being recognized. As we saw in the schoolgirl deaths, violence or abuse in the home was the reason for the leaving, living rough, maybe taking drugs, and ending up with the pregnancy that caused their death. Failure of social services to protect these children was noticeable. They are criticised publicly for child deaths caused by parents, but not these.

However, we are already seeing cases where staff wrongly believing the woman is at risk of violence can misfire and do enormous harm.

Near Misses

The report ends with a plea for studies of "near miss" cases, since these are more common than maternal deaths. It also means survivors could be interviewed.

AIMS Comment

Hurrah! This is something we have also wanted for a long time.

References

Why Mothers Die 1997-9. The Fifth report of the Confidential Enquiries into Maternal Deaths in the United Kingdom, RCOG 2001