

Caroline de Costa is Professor of Obstetrics and Gynaecology at the James Cook University School of Medicine in Cairns. She has been a specialist obstetrician for many years, taking up her present position in 2004. She has a strong interest in improving women's access to reproductive health care and, in particular, in the provision of abortion services and the reform of abortion law. Professor de Costa has published [two books](#) on these topics.

I thank the Society for inviting me. I am going to talk about late abortion, mostly from the medical point of view and, in particular, points where the law may impact on the practice and the decisions around late abortion.

Terminology

First of all, some terminology. In actual practice, we don't use the term 'late term abortion'. We divide abortion into 'early' and 'late', with a cut-off point at around 14 weeks' gestation. This is because, up to 14 weeks, aspirational curettage of the uterus to remove the contents of the uterus can be safely done by the vaginal route. After that, it becomes increasingly unsafe for the woman. Up to 14 weeks, in appropriate circumstances and with appropriate operators, it is very safe, although there is increasing risk – an increasing chance of morbidity – with increasing gestation. So, statistically, an abortion at 7 weeks is much safer than one at 14 weeks.

Early abortion

Before you can evacuate the uterus and perform an abortion, it is necessary to dilate the cervix. As I realise that I'm talking to a mixed audience of doctors and lawyers, I need to explain this a little. You need to dilate the cervix, which normally holds the pregnancy in during the pregnancy. Traditionally, this was done with dilators, metal instruments of increasing size, but more recently we use a drug called Misoprostol, which does this by altering the consistency of the cervix.

Ninety-five per cent of all abortions in Australia are early; they're largely performed in the private sector for socio-economic, psychological and some medical reasons. The majority are still done surgically, although increasingly we are starting to perform what's called 'medical abortion'.

This is a rather confusing term; it actually means the use of drugs for abortion. The drugs are Mifepristone, which is possibly better known to you as RU486, and the drug, Misoprostol, which I have mentioned. The woman is given the drugs in a clinic or in the surgery. The abortion process, which is like a spontaneous miscarriage, takes place in the woman's home. This is likely to become increasingly more common in Australia.

Late abortion

Most late abortion in Australia is done because a fetal abnormality has been diagnosed during the pregnancy. So I need to tell you a bit about how we diagnose fetal abnormality, using screening tests and diagnostic tests.

Screening tests

It is recommended that all pregnant women in Australia be offered screening at 10 to 14 weeks' gestation. This is not invasive. It doesn't interfere with the pregnancy. It involves ultrasound measurement of the thickness of the tissue on the back of the neck of the fetus and some tests on the woman's blood.

These are put together to give a risk assessment of her chances of having certain abnormalities. They include Down Syndrome (a chromosomal abnormality), other chromosomal abnormalities, and some less common abnormalities, in particular, in relation to the development of the heart. This extensive testing will pick up 90 per cent of women whose fetus has these abnormalities, but there are a lot of false positives; so it is a screening test.

Diagnostic testing

For a woman found to be at high risk, we have to discuss whether or not she wants to proceed to diagnostic testing. Diagnostic testing is invasive – it is necessary to take some tissue from the

pregnancy using a long needle and using ultrasound guidance. The testing is ‘chorionic villus sampling’, which takes a little bit of the placental tissue at about 13 or 14 weeks, or ‘amniocentesis’, which takes some of the amniotic fluid from around the fetus at about 16 weeks.

These tests come with some risk of a miscarriage of what might turn out to be a normal fetus. So the woman and her partner have to think quite hard about this decision and balance the risk of testing against the chances of the diagnosis of abnormality.

Testing for structural abnormalities

We also recommend that all women at 18 to 20 weeks have an ultrasound scan which looks for structural abnormalities in the development of the brain, the heart and so on. The results of most of these tests often don’t come in until 16 to 20 weeks’ gestation. Structural abnormalities, especially of the heart, might not be fully diagnosed until close to 24 weeks. Many jurisdictions regard the 20 to 24 weeks fetus as viable and require registration of stillbirth or birth or death and coronial reporting.

In actual practice, we regard 24 weeks as the start of viability. Some fetuses have survived at 23 weeks; very few at less than that.

Signs of life

The other problem with this period of gestation is that, despite the presence of severe or even ultimately lethal abnormalities, fetuses born at these gestations and sometimes earlier may show signs of life after they’re delivered. There may be respiratory efforts or a normal heart beat for some time following delivery. You can imagine how very distressing this is for women and indeed for the staff caring for them.

Experimental screening techniques

I am going to side-track a little to talk about what is happening experimentally. It has been possible to extract from maternal blood, as early as six weeks into a pregnancy, DNA from the fetus from which the full genetic sequence of the fetus has been reconstituted. So it’s likely that, in the foreseeable future, it will be possible to diagnose fetal abnormality much earlier sometime in the first 12 weeks of pregnancy. This would be very safe from the point of view of the woman and of the continuing pregnancy of women with a normal fetus. Earlier diagnosis would make the decision about termination of pregnancy easier, but at the same time pose ethical problems as to how major an abnormality would need to be before it could justify terminating the pregnancy.

Late abortion before and after 20 weeks

Clinically, we also divide late abortion into that before 20 weeks and that after 20 weeks. About 4% of all abortions in Australia take place at 14 to 20 weeks. There is no doubt that, both legally and clinically, the fetus is not viable outside the uterus before 20 weeks.

These abortions are mostly performed in hospital, either for major fetal abnormality or for maternal medical conditions which have developed or been exacerbated and not diagnosed until after 14 weeks. These are usually performed in Australia using Mifepristone (RU486) and Misoprostol, which brings about an early labour and expulsion of the pregnancy. A small number of clinics in Australia perform these late abortions as surgical procedures for psycho-social and economic indications.

Abortion after 20 weeks is quite rare – about 1% of all abortions across Australia. It varies across jurisdictions depending on the law, because, as you’d probably be aware, abortion law in Australia is still state or territory law.

Abortion and the law

You can see the difference in Western Australia, where there has been abortion law reform. Only 0.6% of all abortions are done after 20 weeks, because they are restricted to fetal abnormality and need to be approved by a committee appointed by the Minister for Health. By contrast, in South Australia, where this is not the case, and where the decision is made by the woman in conjunction with two doctors,

1.5% of abortions are done after 20 weeks. Furthermore, it is possible in South Australia to have an abortion at this stage for psychiatric conditions.

‘Abortion tourism’ does occur in Australia, for example, from Western Australia to places such as Victoria, but not to South Australia because of their two-month residence requirement.

Indications for late abortion

The indications for late abortion in Australia are overwhelmingly fetal abnormality and secondly, serious maternal medical conditions, such as cancers or auto-immune conditions which are diagnosed, or which worsen, during the pregnancy.

In those cases, certainly in those I have experienced, where there is a normally developed fetus and no major maternal physical illness, there are usually major socio-medical factors, such as maternal intellectual impairment, rape, incest, late diagnosis of pregnancy, strong social pressures on a woman from an ethnic background – that kind of thing which leads to her requesting abortion, or an abortion being requested on her behalf, after 20 weeks. These are not easy cases to deal with.

Medical late abortion

Australian practice now is almost universally medical abortion. Until 2006, we used only Misoprostol, which is effective at bringing about late abortion. But it can take quite a long time, sometimes days, which is very distressing for the woman. Using Mifepristone together with Misoprostol shortens the time, makes it much less distressing for the woman and her support people and it decreases the incidence of certain complications, such as associated infection and fever.

Mifepristone is still not available nationally because no drug company has yet had approval from the TGA, the Therapeutic Goods Administration, to market the drug nationally. This drug is still controversial in Australia and Australia is a small market; so no drug company has yet applied or had their application approved.

We have got around this by using the ‘authorised prescriber’ legislation of the TGA, which has nothing to do with abortion, but is available so that doctors can import drugs for use in their own practices. One has to make an individual application to the TGA. A press release from TGA yesterday stated that there are now 179 of us able to prescribe the drug. But it really needs to be nationally available – not in this special category.

Administration of the drugs

These drugs need to be administered in a hospital or in a proper clinical situation. One reason for its taking place in an appropriate clinical setting is that there’s a reasonably high risk of complications - haemorrhage and retention of the placenta after the fetus is delivered. It is important to note that these are also the recognised complications of spontaneous early birth. They are not specific to induced abortion. It is important that the woman has competent and sympathetic nursing staff to assist her through this process. Most hospitals do have very good support systems in place.

The fetus showing signs of life

Now we come to this question of the fetus being delivered and showing signs of life. Most Australian maternity units have policies regarding feticide for non-lethal, but severe, conditions, for example, severe open neural tube defects, such as spina bifida, where the fetus cannot survive, but might be born alive. The techniques of feticide, basically stopping the heart of the fetus in utero, include injecting potassium chloride into the heart or Lignocaine, a local anaesthetic, into the umbilical cord. This needs special ultrasound skills, so it is done by ‘maternal-fetal medicine’ specialists. They are specialised obstetricians with a particular interest in the peri-natal period.

The reason for performing feticide is to reduce the distress to the woman, to her partner, to her support people and to the staff. But as you can imagine, it’s very confronting for doctors. The end result is exactly the same as if you were to induce labour and allow death to arrive naturally to this severely affected fetus, but performing the actual action can be much more confronting for doctors.

It is unusual in the United States to practise late abortion medically. It's much more commonly done surgically, by dilating the cervix, as is done with early surgical abortion in Australia, but to a greater extent, and then to remove the fetus. Destructive procedures are often necessary to achieve this.

These procedures require much experience and skill, and, as you would imagine, a particular kind of person prepared to do this on a fairly routine basis. General anaesthesia is usually used. This has been described as "displacing some of the psychological distress from the woman to the gynaecologist."

Australian practice

In Australia, we offer the screening and the diagnostic procedures throughout the public system. But there are parts of the public system run by the Catholic Church. Although being able to offer termination of pregnancy is one of the reasons for offering screening in the first place, there are certainly some large hospitals, for example the Mater in Brisbane, where only the screening and diagnosis are provided, but not the information that the woman is entitled to terminate the pregnancy or where she should go to have this done.

Doctors' views in the UK

What do health care professionals themselves think about late abortion? This has not been studied very much. I did find [a 2006 study](#) which looked at 16 doctors and nurses from four institutions across the United Kingdom. The 1967 UK Abortion Act, plus some later amendments, do permit abortion if there exists a substantial risk that, if the child were born, it would have a severe mental or physical abnormality. But all the people interviewed acknowledged the difficulties working within the law while responding to women's needs and dealing with their own personal feelings.

It was clear from the interviews that the units differed in what they saw as abnormalities which reasonably warranted termination of a pregnancy. They discussed amongst themselves what they felt comfortable with. As a result, these units often differed in their practice even though they all felt that they were following the legal criteria. All of them felt that provision of a specific list of allowable complications would not be helpful, given the very great range of rarer complications that can occur in nature.

Doctors' views in Australia

We have even less information on what Australian health care professionals think about abortion. In 2009, together with two colleagues, I conducted an [on-line study](#) of all my fellow specialist obstetricians and gynaecologists and trainees. Half of those who were eligible – 1,500 were eligible – responded. Most of those who didn't were probably working in areas such as gynaecological cancer where they don't come across abortion.

We found that 85% of specialists did not hold religious or conscientious views which would make them totally opposed to abortion. About three-quarters of these were actually performing abortions, most of which were late. A high proportion, 44%, would do this for severe fetal abnormality only, or for serious maternal medical conditions.

But interestingly, of the 15% who said that they were totally opposed to abortion, 56% of them would be opposed in *any* situation and 44% were opposed with limited exceptions. Nevertheless, about half of them were either prepared to perform abortions for serious fetal abnormality or for maternal medical conditions or to refer to their colleagues. We thought it quite interesting that they weren't allowing their personal views to interfere with their practice.

The future of late abortion

What does the future hold? It's likely that all late abortion in Australia over the next few years will become medical and be done with Mifepristone and Misoprostol. Hopefully, in the next year or so, we will see the national introduction of Mifepristone.

20 to 24 weeks gestation is a difficult area and it's likely to become more so. As advances are made in the care of very premature infants, the definition of viability will be pushed back more and more. When

I was training thirty years ago, it was 28 weeks – we couldn't imagine that a fetus could be born at between 24 and 28 weeks and survive. Now they *do* survive and often have no intellectual or physical disability as they grow up. There is thus potential conflict for those people working in the area of maternal fetal medicine. Some fetuses are aborted at this stage and others are subject to heroic life-saving measures.

There is, however, as I have said, great potential for much earlier diagnosis of fetal abnormality. There is also a potential for *in utero* treatment of certain abnormalities.