A life in science

Dr Gillian Lockwood



Dr Gillian Lockwood specialises in IVF and the ethical issues surrounding fertility treatments. She is the medical director of Midland Fertility Services, one of the largest IVF units in the UK. Here she tells us about her life in science.

t may surprise you to discover that I did not have any desire to be a doctor when at school. I didn't even study sciences — I only took O-level biology. I studied arts A-levels and went to St Hilda's, Oxford, to study philosophy, politics and economics. After my degree I won a cadetship to study applied statistics, but there was a price to pay — I was expected to work for the Government Statistical Service for 2 years. This led to me becoming a civil servant in the Cabinet Office, calculating the retail price index (an important measure of inflation).

At the time inflation was a serious problem. Prices and wages were on an upward spiral and the economy was in trouble. Things came to a head during the 'winter of discontent' in the late 1970s. Many workers, particularly local authority employees, were on strike. The streets were full of uncollected

Box 1 Polycystic ovary syndrome

Polycystic ovary syndrome is very common but is a 'cinderella' of the gynaecological world. Some of the classic symptoms include weight gain and hairiness, as well as difficulty conceiving. There is some genetic basis linked with the complex of genes involved in diabetes.



rubbish, which made life difficult. Each day I commuted from Oxford to London on the train.

Change of direction

One particular day my boss phoned me and told me to work at home rather than risk the train. I switched on the television for the lunchtime news and saw instead a documentary about the work of Dr Paul Tessier. He was a craniofacial surgeon working with newborn babies with deformities of the head. Disenchanted with statistics, I realised that was what I wanted to do with my life. So I set out to become a plastic surgeon.

I resigned from my job and went to a college of further education to do science A-levels in a year alongside students resitting their A-levels. I supported myself by teaching some A-level history and politics. At the time it was rare for people to take gap years or go to university as mature students so finding a university that would look kindly on a mature retrainer wasn't easy. I applied to Oxford again, took the exam for would-be medical students and was offered a

O-levels were the equivalent to GCSEs.



Box 2 Useful websites

• Find out more about Midland Fertility Services at: www.midlandfertility.com

- The Human Fertilisation and Embryology
- Authority website is at:

www.hfea.gov.uk/cps/rde/xchg/hfea

place at Lincoln College. I took a 3-year physiological science course, gaining a first-class degree, followed by 3 years of clinical medicine. I qualified in 1986.

Another change

I still wanted to do neonatal plastic surgery and went to Boston to observe Dr Paul Tessier's work. Unfortunately a major reorganisation of plastic surgery units reduced the opportunities to start in plastic surgery, and being older and female didn't help either. A senior plastic surgeon suggested I should think of IVF work instead — the first test-tube baby, Louise Brown, had recently been born. More training in obstetrics and gynaecology followed and then I moved to the John Radcliffe Hospital for IVF training.

A big clinical trial involving IVF was getting underway so, with my expertise in statistics, I was recruited to the trial. As a result I spent 10 years as clinical research fellow at the Oxford Fertility Unit, researching polycystic ovary syndrome (see Box 1), premature ovarian failure and recurrent miscarriage, gaining a doctorate on the way. In 2000 I joined Midland Fertility Services. This work is very rewarding. There are so many places where the process of having a baby can go wrong. Most infertile couples have a clear medical pathology for which there is a reasonably cost-effective solution. However, it is difficult for them to obtain NHS treatment for their condition, so many have to fund their own treatment.

IVF

I am particularly proud that the clinic was the first, and is still the only, UK clinic to successfully use frozen eggs for producing a child. The main purpose was to help young women who were about to lose their ovaries as a result of cancer treatment, for example. There are other reasons too, such as premature menopause. The eggs can be thawed and used at a later date. The clinic has a useful test that can indicate a woman's ovarian reserve — that is how much longer she can expect to produce healthy eggs.

Using frozen eggs bypasses many of the ethical problems linked to using frozen embryos, such as what to do with surplus embryos, and what happens if the parents part before the embryos can be implanted. For many years I have sat on ethical committees for the Royal College of Obstetrics and Gynaecology and the British Fertility Society. My background and formal training in ethics, as part of my philosophy degree, is useful for this role. Medical schools are now encouraging ethical thinking throughout a doctor's training. You may have seen Gillian on television talking about investigating the extent of a woman's reproductive age.

• Find out about more polycystic ovary syndrome.