

Features

Women brave IVF complications for children

Women continue to use In Vitro Fertilisation to conceive, despite increasing evidence of dangerous side effects.

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Every year, more than 3.7 million babies are born across the world with the help of fertility treatments [GALLO/GETTY]

After returning home to London from a holiday with her new husband in 2004, Lee Cowden was hit with crippling chest pains. It turned out to be a heart attack that had been caused by a high dose of *In Vitro Fertilisation* (IVF) drugs.

Facing ovarian problems, the 33-year-old had taken the drugs to improve her chances of conceiving a child, but has become one of many women who are facing serious side effects from IVF.

Each year, more than 3.7 million babies are born across the world with the help of fertility treatments, but experts are increasingly wary of side effects associated with the treatment.

"I was diagnosed with Polycystic Ovarian Syndrome (PCOS) when I was 15 and was told at that point that I would need to have fertility treatment to have a family," Cowden, a music teacher, told Al Jazeera. "I married at 25 and straight away started to undergo the fertility treatment."

[Louise Brown](#), the world's first "test tube baby", was born in July 1978, and the process has since helped many couples conceive. Robert Edwards, who is credited with developing IVF, won the Nobel Prize in Medicine for his work.

After Cowden's initial attempts to conceive a child failed, the London clinic where she was receiving treatment doubled the quantity of drugs she was to ingest, part of the process known as high-dose IVF.

"After the heart attack, I was told that I could no longer have conventional IVF," she said. She was diagnosed with Ovarian Hyper Stimulation Syndrome (OHSS), a condition linked to high doses of the medication.

### **Side effects**

In the UK, nearly 60,000 cycles of IVF are carried out each year. A recent study into maternal deaths found that

OHSS, following high-dose IVF, is now [one of the leading causes of maternal mortality in England and Wales](#).

"In most of the cases, it is possible to predict the complications involved," Dr Sadoon Sadoon, consultant gynaecologist for Medway NHS Foundation Trust, told Al Jazeera. "It's necessary to monitor women undergoing treatment for the OHSS, as it gives rise to other related complications."

According to the [National Institutes of Health](#), high-dose stimulation [leads to OHSS](#) in as many as ten per cent of IVF patients.

The severe form of the condition occurs in about two per cent. "It is potentially fatal," Dr Geeta Nargund, president of International Society for Mild Approaches in Assisted Reproduction ([ISMAAR](#)), and medical director of [Create Health Clinics](#), said of the severe form. "If it is not addressed immediately, there is a risk of kidney failure, clotting problems, including pulmonary embolism and liver disorder."



Dr Robert Edwards (left) with Louise Brown shortly after her birth at Oldham General Hospital, Lancashire, on July 25, 1978  
[GALLO/GETTY]

### Birth defects

High doses of IVF drugs also affect fetuses, not just the mothers, according to recent research.

In 2008, an analysis of the data of the [National Birth Defects Study in the US](#) found that certain birth defects were significantly more common in babies conceived through IVF, notably septal heart defects, cleft lip with or without cleft palate, esophageal atresia (in which the esophagus does not develop properly) and anorectal atresia (a malformation of the anus).

A 2010 US study also suggested that high doses of IVF contributed to lower birth weights, compared with babies born to women who receive minimal doses of the drugs.

Patients need to consider the "potential risks and benefits" of various reproductive technologies, [said](#) Jennita Reefhuis, epidemiologist at [CDC's National Centre on Birth Defects and Developmental Disabilities](#), and the lead author of the recent report published in the *Human Reproduction* journal.

Adding to those possible risks, a new [Australian study](#) published in the *New England Journal of Medicine* examined birth defects associated with different types of assisted reproductive technology.

"While assisted reproductive technologies are associated with an increased risk of major birth defects overall, we found significant differences in risk between available treatments," said the study's lead author, Michael Davies from the [University of Adelaide](#).

Sperm injection (ICSI), one of the most invasive forms of IVF, for example, is being "overused", according to its inventor, Dr André van Steirteghem.

Dr Steirteghem [told](#) the American Association for the Advancement of Science (AAAS) that he believed "ICSI was being used too often" and should only be "used when absolutely necessary".

### Switching to mild IVF

These warnings might come as a surprise to women who are unaware of complications associated with IVF treatments. From the moment they are unable to conceive naturally, many turn to IVF and end up facing complications afterwards.

"When we offer IVF, we should give women options of having natural (drug-free) IVF, mild IVF (small amount of drugs) and conventional IVF (high dose drugs)," Dr Geeta Nargund, an author of more than 100 peer-reviewed scientific papers on reproductive medicine, told Al Jazeera.

Mild or soft IVF uses very low dose stimulation for a shorter period of time within a woman's own menstrual cycle which can reduce the burden and discomfort of treatment, including the risk of OHSS. "It is also associated with healthier eggs, embryos and the lining of the uterus," said Dr Nargund.

High doses of IVF drugs can lead women to produce 20-30 eggs per cycle, as opposed to just one. "This over-stimulation of ovaries carries additional risks," said Dr Sadoon.

Many countries, including the Netherlands, Denmark, Sweden, the UK, Japan and South Korea, are switching to mild or soft IVF from more aggressive forms of conventional treatment.

## Witness: Mother India

But some women still prefer high dose IVF treatments, despite possible risks, as they think they will have better chances of conceiving.

"The ultimate joy I got when I saw the face of my babies - nothing matters, not even the amount of complications I went through during the treatment," a 35-year-old woman preferring anonymity, who suffered three miscarriages before recently giving birth to twins, told Al Jazeera.

Cowden, who was asked to stop standard IVF drugs because they caused her heart-attack, started having mild dose of IVF treatment a year later. "I was given small doses of fertility drugs and carefully monitored. I conceived within three months of the treatment with Molly, who is now five," Cowden, a mother of two, told Al Jazeera. "I cried my eyes out when the nurse finally said: 'Test is positive, you are pregnant.' I was more than happy."

Source: Al Jazeera



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