

World at 'peak twin' as birth rates reach historic high, study finds

Access to IVF and fertility services and postponement of parenthood drive rise in global twinning rates



Matching sets of siblings and pose for a group photo during the annual Twins Days festival in Twinsburg, Ohio. Photograph: AFP/Getty Images

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Twins may be more common today than at any time in history, according to the first comprehensive survey of twin births around the world.

Researchers analysed records from more than 100 countries and found a substantial rise in twin birthrates since the 1980s, with one in 42 people now born a twin, equivalent to 1.6 million children a year. According to the study, the global twin birthrate has risen by one-third, on average, over the past 40 years.

Rather than seeing the trend continue, the world may have reached “peak twin”, the authors say, as the most recent data suggest some countries have begun to see twinning rates plateau or even fall from historic highs.

“The trends are really quite striking,” said Christiaan Monden, a professor of sociology and demography at Oxford University. “Over the past 40 to 50 years we’ve seen a strong increase in twinning rates in rich, developed countries, and that has led to more twins in both a relative and an absolute sense than we’ve seen ever before.”

Twins are born naturally when a fertilised egg spontaneously splits in half, leading to identical twins, or when the mother releases two eggs at once that are both fertilised, producing non-identical twins. Most now are born as a result of fertility treatments, such as ovarian stimulation or having more than one in vitro fertilisation (IVF) embryo transferred into the womb at the same time, a practice now discouraged in many countries on health grounds.

While the birthrate for identical twins has barely changed over time, Monden and his colleagues found that naturally conceived, non-identical twins and twins born as a result of medically assisted reproduction – an umbrella term for a range of fertility treatments – had risen globally.



Five-year-old twins Syanda, left, and Andile Bhengu pose for a photograph during a celebration for the 21 pairs of twins at their primary school in Durban, South Africa. Photograph: Kim Ludbrook/EPA

The main drivers are increased access to hormone treatment, IVF and other fertility services but also the postponement of parenthood – the chances of

having natural, non-identical twins increases with age and peaks at 35 to 39 years old.

The researchers analysed twinning rates from 2010-15 in 165 countries covering 99% of the world's population. For 112 of those, they examined further birth records for 1980-85, according a report in [Human Reproduction](#).

Globally, twinning rates have risen from nine to 12 per 1,000 births since the 1980s, but the picture varies substantially from country to country. The greatest rises are seen in North America (71%), Europe (60%) and Asia (32%). In the UK, twinning rates rose about 62% but are thought to have fallen since the Human Fertilisation and Embryology Authority (HFEA) launched a campaign to reduce multiple births in 2007. In the Oxford study, a decrease of more than 10% was found in only seven countries over the dates surveyed.

Africa has a high rate of twins born naturally from two separate eggs, and according to the study 80% of twins are now born either in Africa or Asia.

“The absolute number of twin deliveries has increased everywhere except South America,” Monden said. “In North America and Africa, the numbers have increased by more than 80%, and in Africa this increase is caused almost entirely by population growth.”



Raj Mathur, chair of the British Fertility Society: 'I think we've reached a peak, in terms of twinning rates from medical interventions, certainly in the developed world.' Photograph: Christopher Thomond/The Guardian

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Arwa Mahdawi

Raj Mathur, the chair of the British Fertility Society and a consultant gynaecologist at St Mary's Hospital in Manchester, said: "It doesn't surprise us that twinning rates have increased because the availability of assisted reproduction has increased and also because women are slightly older when they have their first children, and both those things will increase the twin rate.

"But at same time it's very likely that if you look at western Europe, particularly the UK and Scandinavian countries, you might find that the rates are lower than they were in 2010 and 2015. The HFEA and the UK sector have achieved a year-on-year reduction in multiple birth rates, which were once at 20% and are now around 10%.

"I think we've reached a peak in terms of twinning rates from medical interventions, certainly in the developed world, but the spread of IVF in Africa and South America is still rather limited on a per capita basis, and there are vast numbers of sub-fertile people in Africa particularly who don't have access to IVF. The challenge will be how to spread IVF to them without also giving them higher twin rates.

"The majority of twin babies are absolutely fine, but there is no doubt that a twin pregnancy carries greater risks for the mother and the baby, so when we can avoid it we should avoid it. The principle we follow is neatly summed up by the phrase 'one at a time'," Mathur said.