

MOTHERHOOD OR CAREER WHICH COMES FIRST?



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Ruchi Sharma, 37, a top executive in an MNC, married for seven years, is desperately trying to conceive since the last two years but with no results. All her test reports are apparently normal and she is absolutely clueless about what has happened to her fertility. According to Ruchi, "The initial five years of my marriage, I did not even have the time to think about pregnancy, let alone the idea of bringing up a baby. Work, meetings, project deadlines were the only things in my life. When I started thinking seriously about starting my family, it just did not happen. Now, I am gradually sinking into depression."

Cases like Ruchi's are not uncommon and there is a whole breed of new-age women like her who do not choose to have a baby because of work commitments. This new "professional hazard" is spreading like an epidemic especially in metropolitan cities. Professional and personal opportunities have exploded for women over the past 30 years encouraging them to postpone motherhood.

A majority of 33% high-achieving women who are childless at the age of 41-55 did not choose to be childless and would still like to have children. They simply forgot that their biological clock ticks in unison with the time-line for other achievements.

When to see infertility expert:

- If a female is in her 35 years and unable to conceive after one year of unprotected intercourse.

- If the female is under 35 years and unable to conceive after six months of unprotected intercourse

According to Dr K.D.Nayar, chief consultant, Akanksha IVF Centre, New Delhi, who performs more than 400 IVF/ICSI cycles annually, "I daily see 8-10 females of 35 years or above who are desperate to conceive and their number is sharply rising. Women are known to be born with a limited quantity of eggs.

They start to experience decreased fertility rates in their late twenties and this rapidly accelerates as they reach their thirties. As the age increases, the quality and the quantity of eggs decline, affecting fertilisation success, embryo quality and pregnancy rates. Ovarian functions can decline without women even realising it. The biology of female eggs has not kept pace with career life-spans of today."

How old is too old?

- At the time of birth: two million eggs
- At puberty: 400,000 eggs
- At 40 years: 40,000 to 50,000 eggs
- 45 years: 5000 eggs
- Beginning in the twenties eggs begin to diminish in quantity and quality. Significant deterioration occurs after 35 years.

As a woman ages, a number of changes take place in her reproductive system. For women, the cessation of menses (menopause) is an obvious sign of ageing. But it is by no means the only change. A transition period lasts for many years before menopause and this occurs because of a distinct and dramatic decline in oestrogen production. And as a woman ages, the genetic quality and quantity of their eggs and the efficiency with which their bodies reject genetically damaged embryos both decline, leading to an increased risk of genetic problems in the baby. This triad of declining fertility, declining hormone levels and increasing risk for genetic problems is what most people mean when they say "biological clock".

According to Dr Nayar, "Only in 80% of the cases the cause of infertility can be directly traced to the husband or wife or both the partners and in the rest 20% no specific reasoning found after investigation and evaluation of the couple.

This unexplained type of infertility is specifically more common in females above 35 years of age."

Female biological clock:

- 1 Women in their 20s:**
Fertility rate/month is 20-25%
Spontaneous miscarriage rate: 5-10%
Incidence of genetic abnormality (Down's Syndrome) is 1 in 1200.
These younger women are physically active and should do moderate exercises in the first and third trimesters and should avoid smoking alcohol, caffeine etc.
- 2 Women in their early 30s:**
Fertility rate per month is 15%
Miscarriage rate 20%
Should start prenatal vitamins.
- 3 Women above 35s:**
Fertility rate per month 10%
Miscarriage rate 25%
Risk of Down's syndrome 1 in 350
Genetic testing is recommended.

4 Women in their 40s:

Sharp decline in achieving pregnancy.
Fertility rate per month is 5%, Even with IVF, success rate is 10%
90% of eggs are genetically abnormal on biopsy.
Miscarriage rate is 33%
Incidence of genetic abnormalities is one in 38

5 Women above 45s:

Pregnancy is a difficult proposition as virtually all the remaining eggs are genetically abnormal
1% chance of getting pregnant using their own eggs
Miscarriage rate is 45%
Incidence of genetic abnormality: 1/12
Egg donation is the key.
Oocyte donation success rate: 80%

Ageing in men:

In the last 30 years, there is a 50% increase in men who became fathers above the age of 35. The genetic quality of sperm does decline, leading to an increased risk of genetic problems in offspring above and beyond any contribution by the female. Although it's an idea that has not yet filtered down to the general public, we now know that men have biological clocks too. And those clocks involve the same physiological triad experienced by women.

Male fertility and male sex hormone do decline with age although not as steeply or as suddenly as with menopause. 1% per year decline in testosterone level after age 30 is termed as "andropause". A more technically accurate term is "symptomatic hypogonadism" in ageing males that is serum testosterone < 325ng/ml. The symptoms include decreased libido, erectile dysfunction, loss of muscle mass, weight gain, declining cognitive functions and risk of type II diabetes. Older men are at a higher risk of harbouring a child with schizophrenia and also risk having children with Down's Syndrome. Hence, now the features of ageing have expanded the notion of "biological clock" to include both sexes.

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