

# Infertility can be a man's problem too



There is no clear reason for the global decline in semen quality, but it has been linked to diverse factors such as exposure to chemicals, pollution, stress and an unhealthy diet. PHOTO: ISTOCKPHOTO

## Rising male infertility rates here mirror the global phenomenon of declining sperm quality, say doctors



Venessa Lee

When Don (not his real name) found out the reason he and his wife could not conceive after trying for 1½ years, he was devastated.

The 40-year-old was diagnosed as having a low sperm count after the couple had fertility checks done at a hospital about four years ago.

"I kept saying sorry to my wife. We are family-oriented and believed we could be good parents," Don, who works in sales, recalls.

His 37-year-old wife works in the education sector.

Like other men with fertility issues, there were no other obvious symptoms, apart from the fact that the couple were not able to conceive.

While there is generally more discussion on female infertility in the media, male infertility is on the rise in Singapore.

Hospitals and fertility clinics are reporting a spike in the number of such cases in recent years, which doctors attribute in part to changing societal attitudes towards reproduction.

More couples are now willing to get tested, especially after a year of trying for a baby in vain, a general benchmark indicating possible fertility issues. This results in more cases of male infertility being uncovered, says Dr Yeong Cheng Toh, a fertility specialist at Virtus Fertility Centre Singapore.

Compared with the past, when women traditionally bore the stigma of infertility and childless-

ness, "couples are now more equal in their approach", he notes.

Dr Valerie Gan, a consultant urologist at Singapore General Hospital (SGH), adds: "There is more awareness of the man's role in infertility issues."

SGH has seen a five-fold increase in male infertility cases, from 10 new cases in 2015 to 50 last year.

Some providers of fertility services report a leap of more than 70 per cent of such cases.

The number of patients who sought treatment at the male infertility clinic at National University Hospital (NUH) rose about 80 per cent in three years. About 270 patients were seen last year, compared with slightly more than 150 in 2015.

Virtus Fertility Centre Singapore saw a 72 per cent increase in male infertility cases from 2015 to 2017. The centre had close to 400 male infertility cases in 2017, of which about 80 per cent featured diagnoses of low sperm count and/or poor sperm quality.

While there is a lack of nationwide data regarding male reproductive health, doctors say rising male infertility rates here mirror the global phenomenon of declining sperm quality in the last 40 years.

Dr Joe Lee, consultant and director of andrology and male reproductive medicine at NUH's department of urology, says that in his experience, it is not uncommon to see men with lower sperm count.

More men are also having zero sperm count.

General semen quality is getting poorer globally, he adds, referring to World Health Organisation (WHO) data over the years.

The organisation's first edition of its laboratory manual for semen analysis was published in 1980. The standards by which it gauges the parameters for "normal" sperm have been progressively lowered over the decades.

For its fourth publication on semen analysis in 1999, it assessed "normal" human semen as containing at least 20 million sperm per millilitre of semen (the fluid containing sperm), with a motility rate of at least 50 per cent. Motility

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refers to the ability of the sperm to move towards the egg to fertilise it, resulting in pregnancy.

But these measures had declined by the time the latest WHO guidelines were published in 2010, when "normal" human semen was assessed to contain at least 15 million sperm per millilitre of semen, with a motility rate of at least 40 per cent.

In a study reported in 2017, scientists at the Hebrew University of Jerusalem found that sperm counts among men in the West have more than halved in the past 40 years.

There is no clear reason for the global decline, physicians and scientists say, but it has been linked to a diverse range of factors such as exposure to chemicals, pollution, stress and an unhealthy diet.

While there are many reasons for male infertility, common causes are low sperm count or motility, or abnormal sperm.

Lifestyle changes, such as quitting smoking, eating better and exercising to reduce obesity, can help men with fertility problems. Treatments include surgery to retrieve sperm, hormone medication and treatment for problems with sexual intercourse.

Two surgical operations, in 2015 and 2017, as well as changes to his lifestyle were what Don had to undergo after his problem was diagnosed.

To try and boost his fertility levels, he exercised more to achieve optimum health. Although some of the treatment costs were subsidised, he and his wife saved up about \$15,000 for surgery, medication, regular injections and in-vitro fertilisation (IVF).

Don says he also had to fend off, with a "smile", queries from friends and family about when he and his wife were going to have kids.

He sometimes wondered: "Is there going to be a light at the end of the tunnel?"

It was a gruelling time for the couple, who have been married for seven years, especially after the first sperm-retrieval procedure, which was unsuccessful. But the second operation was successful.

Dr Gan from SGH, who is also

director of the hospital's sub-fertility service, says the majority of male infertility patients she sees are in their 30s and 40s, like Don. "It is the peak age when couples start having kids and growing their family."

She notes that social trends of marrying later play a role in encouraging couples to get tested for infertility, which may lead to more men being diagnosed with sperm issues.

Statistics show that more women are tying the knot later, with the median age for first-time brides at 28.4 years in 2017, compared with 27.2 years in 2007.

While a woman's age is a major factor in her fertility, sperm mutations and a decline in sperm count in older men are also thought to reduce the chances of pregnancy.

The traditional perception, that the woman is usually the infertile partner when couples fail to conceive, has shifted.

Dr Gan says: "In the past, when couples struggle to conceive, the first step was for the woman to see a gynaecologist. Even now, a lot of women will get themselves checked first. But women are also more open now to asking their husbands to get checked."

NUH's Dr Lee has seen how some couples are seeking medical help earlier, compared with when they might take eight years before "mustered up the courage or energy".

But he says, in his experience, "few men come of their own accord". Perhaps because the woman's motivation to conceive is higher in such cases, many men will come forward when urged by their wives, he adds.

Undergoing fertility challenges can change relationships.

Don says: "My wife and I went through a lot, but we had self-belief. Even if IVF failed, we would still have gone on as a couple. The experience has only strengthened our bond."

And yes, they did see the light at the end of the tunnel. Last year, they had a daughter, who is now four months old, after their first IVF cycle.

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