

Many couples are able to have children soon after marriage. For some, though, infertility gets in the way. Thankfully, modern medicine has found ways to overcome this roadblock to parenthood.



# THE OTHER ROADS TO PARENTHOOD

Struggling with infertility? Worried that time is running out on your biological clock? With modern medicine, the situation is far from hopeless—and is pregnant with possibilities for those who wish to conceive.

**I**n 2014, Vanessa Chan and her husband, Dennis, decided to try for a second baby. At this point, the couple already had an eight-year-old daughter, Lexi, who was conceived not long after they got married. Vanessa's first pregnancy happened so naturally and effortlessly that she hardly expected to experience any trouble the second time around. Despite months of trying, however, she failed to conceive.

After a consultation with her doctor, Vanessa found out she had endometriosis, a condition wherein the tissue that normally lines the uterus grows outside it, thus impeding her ovulation and making her infertile.

It was an emotional time, Vanessa recalls: "You would see other women having babies, parang ang dali-dali. I had my panganay, bakit ang dali? Sa pangalawa, ang hirap?"

According to the World Health Organization (WHO), there is an estimated 48.5 million couples all over the world who, like Vanessa and Dennis, struggle to conceive a child due to infertility. Locally, a recent survey of 100 households commissioned by pharmaceutical company Merck Serono found that 1 in 10 Filipino couples share this problem.

## WHEN INFERTILITY STRIKES

Infertility is defined by the WHO as "the inability of a sexually active, non-contracepting couple to achieve pregnancy in one year" or "an inability to become pregnant with a live birth, within five years."

The causes of this condition are varied and complex. For one, a woman's fertility declines as she gets older. Therefore, women who decide to have children later in life naturally face lower chances of getting pregnant. Many medical experts say the ideal age to have a child is 35 and below.

Then there are the many health issues that can affect a person's reproductive system. Women may develop hormonal imbalances and disorders such as, in Vanessa's case, endometriosis, which disturbs the normal process of ovulation;

any medical procedure such as surgery in the abdomen, or a condition like pelvic inflammatory disease, which can cause an obstruction in the fallopian tubes; and ovarian, cervical, or uterine cancer; among others.

Men also face infertility problems such as poor sperm quality, structural abnormalities that can block the flow of semen, and infections or diseases like cancer, which can severely affect sperm production. Studies show that male fertility problems contribute to 30 percent of all infertility cases worldwide.

And still, infertility can sometimes be unexplained. In such cases, doctors are not able to detect anything wrong with either member of the couple after standard assessment.

The trouble with infertility is that it catches you off guard, and it can hit anyone. “There is no surefire way to prove you are fertile in advance, no blood test to screen newborns or teenagers for the inability to have children as one might for hemophilia or celiac disease,” writes author and women’s rights advocate Leslie Morgan Steiner in the book *The Baby Chase: How Surrogacy Is Transforming the American Family*. “Part of infertility’s cruelty is the surprise of its assault. You rarely learn you are infertile until you try, and fail, to have a baby.”

The heartbreak a couple feels when they unexpectedly discover that their bodies have denied them the ability to reproduce is incomparable. “Yung emotional roller coaster ang mahirap, I think, for any couple trying to conceive,” says Vanessa. “I mean, ako meron na akong isa; what more yung mga couples na wala? What more them, who are trying to conceive for the very first time?”

What *is* a couple supposed to do? What happens after you find out you are incapable of having children? The good news: Infertility isn’t always a dead end. While many of its causes are beyond human control, modern medicine has found ways to work around this roadblock and give couples a shot at parenthood.

### TODAY’S TREATMENTS

These days, many would-be parents who experience difficulties conceiving turn to fertility specialists—that is, doctors with a background in obstetrics and gynecology (OB-GYN), specifically trained to administer assisted reproductive

technology (ART).

ART comprises medical techniques—like hormonal medication, and egg and sperm cell collection—that aim to bypass the factors that hinder conception.

Rudie Frederick B. Mendiola M.D., an OB-GYN with sub-specialization in infertility treatment and medical director of the Kato Repro Biotech Center (KRBC) in Makati, which administers ART, explains that patients who suspect they are infertile can still opt to get checked by their general obstetricians first. “But in certain conditions,” he says, “OB-GYNs may have to refer these patients to specialists.”

An OB-GYN can prescribe medication or certain surgical procedures to try to reverse infertility at its onset. But when those don’t work, ART can help.

Vanessa, for instance, upon consultation with her OB-GYN, underwent two rounds of oral medication, plus surgery to address her endometriosis. “I decided to have the surgery right away kasi nga gusto na namin magka-anak,” she says. But when three months had passed after her last round of medication and she still wasn’t getting pregnant, she decided to seek other opinions.

“I went to another doctor, had another ultrasound, and it turned out that my endometriosis was back. And my tubes were already blocked with scars, probably due to

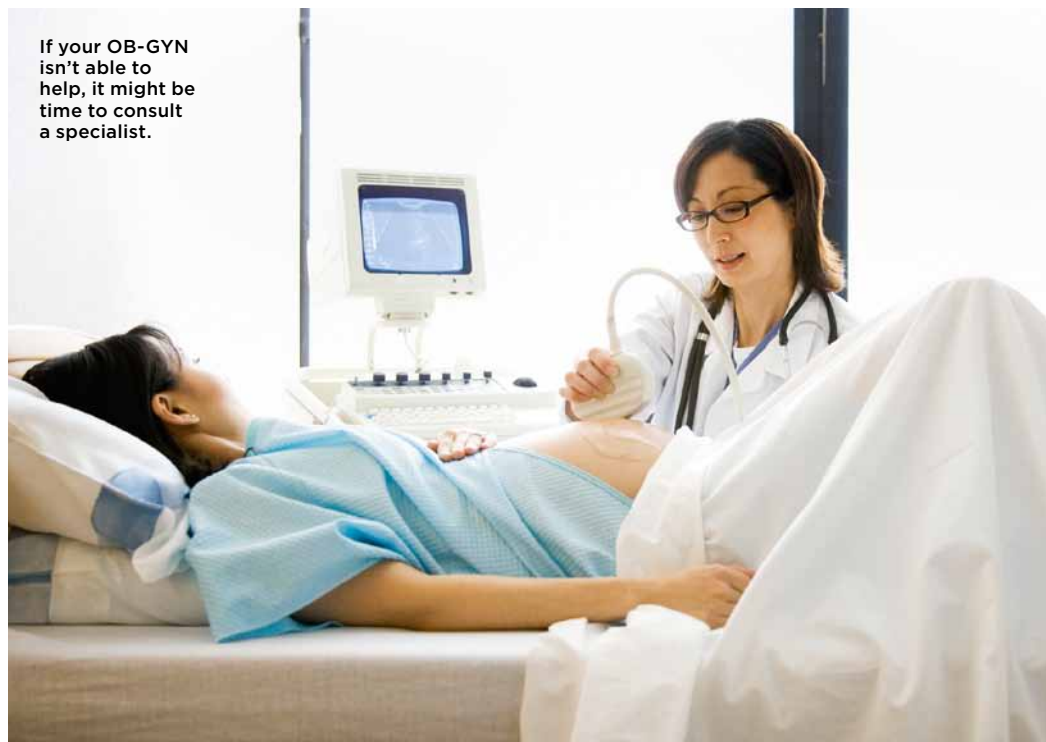
the operation,” she shares. “I went to several doctors, and one said, ‘You can’t have kids anymore.’ The other one said, ‘Let’s do adoption.’ Sabi namin ng husband ko, hindi talaga siya option.” It was then that she and her husband decided to try ART, specifically, in vitro fertilization (IVF).

### In vitro fertilization (IVF)

**What it is:** One of the most common forms of ART today, IVF is a multi-step procedure that generally entails the collection of a woman’s egg cells and a man’s sperm cells, and the act of fertilizing them to form embryos *in vitro* (Latin for “in glass”). This means that fertilization takes place in a test tube or a petri dish before the fertilized egg is transferred to the woman’s uterus. (See “IVF, Step by Step,” page 29.)

Most of the steps of the IVF procedure, from the blood tests and baseline ultrasound to fertilization, are completed within the patient’s menstrual cycle. Many IVF centers also do the embryo transfer within the same time. This is called a “fresh transfer.” However, some recommend another way: In a “frozen embryo transfer,” the embryos are implanted during the woman’s next cycle—or even several months or years later, if the parents prefer. And until this happens, the embryos are frozen and kept in a lab.

**If your OB-GYN isn’t able to help, it might be time to consult a specialist.**



This method increases the chances for a successful pregnancy. Dr. Mendiola explains, “We do that because the medicines we give to make the follicles grow can have a bad effect on the lining of the uterus. That’s one theory. Also, clinically, based on our data—we did a lot of fresh transfers and then we compared them to those who did frozen transfers—we saw higher pregnancy rates when we did the latter.”

Asked if she experienced any pain or discomfort during her procedure, Vanessa says she didn’t feel anything. But as medical procedures go, reactions tend to vary per patient.

Forty-seven-year-old Rachele Bonus-Pestano, who underwent IVF in Toronto in 2003, developed bruising on the site of her injections. “Kasi it’s a very thick formula, and then masakit siya ‘pag nilalagay. Parang you feel it’s inside you. Eh my threshold for pain naman is pretty okay. And hindi naman ako maarte sa ganu’n.”

Despite her high tolerance for pain, Rachele says she also felt some discomfort during the other parts of the procedure. “Nu’ng inimplant, ang sakit-sakit. Parang labor,” she shares. “Kasi during the harvest, the nurse was asking me, ‘Is it painful?’ Sabi ko, ‘Yes, it’s so painful!’ There’s cramping. And then the nurse goes, ‘Well, those are labor pains.’ It’s comparable daw to labor pains, but it’s not the same intensity. Pero yung talagang it’ll make you cry, and you won’t be productive. It’s not something you can enjoy.”

Rachele adds that the procedure “zapped the energy” out of her every time.

**Success stories:** In spite of the physical challenges, Rachele is glad she underwent IVF, especially since it gave her a daughter, Bea, now 12.

The success of Rachele’s IVF procedure—on her first try, no less—was a welcome result after she and her husband, Tom, tried, and failed to conceive, twice through intrauterine insemination (IUI). In this procedure, the sperm is placed directly inside a woman’s uterus where they are left to fertilize. (While most fertility specialists also administer IUI, some would argue that it is not a form of ART since it does not assist the actual fertilization and implantation process.)

Others, like Dada Mabanag-Bautista and her husband, Jay, had to undergo numerous cycles of IVF. The couple, who wed in 2004, did their first round in Singapore after four years of trying unsuccessfully. Dada got pregnant through the procedure, but eventually miscarried. By a happy turn of

Infertility can hit anyone, even women who have already conceived and given birth naturally.



events, however, she conceived her first child, a son, naturally the following year. When they decided to try for another baby a few years later, and it didn’t happen the natural way, they returned to IVF, this time at KRBC.

Their first round at KRBC was unsuccessful. “The test didn’t come out positive, so we went for a second round,” recalls Dada, who eventually learned that the reason for her struggle to conceive was a condition called antiphospholipid antibody syndrome (APAS), meaning her system was “rejecting or attacking anything coming from my husband, hence the miscarriages.” She sought the help of an immunologist to address the APAS, and successfully conceived her second child, a daughter, on her second round of IVF at KRBC in 2015. By this time, Dada was 42.

Even Vanessa underwent several rounds of IVF. It was on her second try (and first at KRBC) in mid-2014 that she conceived her twin boys, Brady and Riley. “To be given one was already a blessing. But to have two? Sabi ko, God really has a sense of humor. He makes you wait and then he gives you two.”

Multiple pregnancies are not uncommon among IVF mothers. In the past, fertility experts would recommend transferring more than one embryo to increase the chances of a successful implantation. These days, however, some clinics have lowered the maximum number of allowed embryos for transfer since multiple pregnancies are also viewed as a complication.

“In the past, knowing that IVF is expensive, and since you’re not sure if the embryo will implant, they would transfer about three to four embryos,” explains Dr. Mendiola. “But when two of those implant and you have more than one baby, you increase the chance of a pre-term birth and other complications. So to avoid that, our center recommends a single embryo transfer. This is the safest for the mother and the baby.”

If parents wish to have twins, though, the clinic can reconsider. “When we started, we were very strict and said only one embryo will be transferred. Then we had a lot of patients who said, ‘Doc, we want twins.’ So we agreed we could transfer two at the most if the reason is you want to increase the chance of twins.”

For Vanessa, the decision to transfer two embryos was not so much based on a desire to have twins but the fact that other factors were not in her favor. “Because of my history of a failed IVF, and then my age [37 at the time], naghahabol na ako. That’s why they transferred two.”

Excess embryos that are not transferred are frozen and kept in the clinic’s lab until the parents come back for them.

According to Dr. Mendiola, the success rate of IVF procedures is now between 40 to 45 percent. Among the 818 patients who underwent the procedure in KRBC in 2015, 371 (45 percent) successfully conceived and 331 (40 percent) had live births.

## IVF, STEP BY STEP

### 1 HORMONAL THERAPY\* FOR FOLLICLE STIMULATION.

At the beginning of the woman's menstrual cycle, blood tests and a baseline ultrasound are conducted to evaluate her hormone levels, the anatomy of her uterus, as well as the number of follicles (the sacs that produce egg cells) present in her ovaries.

If everything is fine, doctors prescribe hormones to stimulate the follicles to produce more than the normal amount of eggs the patient produces per cycle—because the more they harvest, the higher the patient's chances of getting pregnant.

The medication can be self-administered, typically through injection. The patient takes the hormones for about a week and doctors can change doses, if needed, to achieve the ideal follicle growth rate. Common side effects include: headaches, nausea, and bloating, though such symptoms usually disappear during the next cycle.

### 2 EGG AND SPERM RETRIEVAL.

Once the follicles are big enough, the eggs will be retrieved through a transvaginal probe that suctions them out of the ovaries. This outpatient procedure only takes 10 to 15 minutes. The man's sperm will also be collected, and fertilization will happen on the same day.

**3 FERTILIZATION.** In the test tube or petri dish, the egg and sperm are left to fertilize naturally. In cases where the sperm are unable to fertilize the egg on their own, doctors resort to intracytoplasmic sperm injection (ICSI), in which a single sperm is inserted directly into the egg using a needle.

**4 EMBRYO TRANSFER.** Resulting embryos are cultured for about two to five days, until they become multi-celled bodies. Then they are transferred to the woman's uterus, where they will hopefully implant. The patients are asked to come back some days later to undergo a clinic-based pregnancy test.

**How much it costs:** Not so long ago, IVF would command a whopping P500,000 to as much as a million pesos. Now, you can avail of a full IVF package for about P280,000 to P300,000 for one cycle. KRBC, in particular, allows staggered payments—meaning you only pay for the procedure that is done on the day you come in.

### Oocyte cryopreservation (egg freezing)

**What it is:** Sometimes, the problem isn't that a woman can't conceive but that she wants to have children, but can't see herself having them soon—either because of other priorities or not having found the right partner yet. When this is the case, she may consider getting her eggs frozen.

This procedure is similar to IVF: Follicles are stimulated through hormone medication and the egg cells are harvested. But rather than fertilizing the eggs, unfertilized eggs are frozen and kept in the lab until they are needed.

The number of eggs harvested depends on the patient's age, though specialists often recommend harvesting as many as 20 to up the chances of pregnancy. But because the number of follicles varies per woman, and Dr. Mendiola says the average number of eggs they can harvest is 10, women who undergo this procedure are given the freedom to decide if they want to do a second round so they can meet the recommended number.

The best time to get this done, says Dr. Mendiola, is at age 36 or below.

Radio DJ and host Sam Oh, who turned 36 in January 2016, decided to get her eggs frozen that same year. "I'm single, which isn't a bad place to be, but I'm aware of the very real biological challenges I could be facing with reproduction," she says. "I was pretty terrified of the procedure because I had never had any kind of surgery prior to this one."

Sam shares that she experienced some discomfort during the procedure, though it was tolerable. "The procedure was fairly quick but quite uncomfortable (some women often report that it is downright painful). I felt something like acute dysmenorrhea after the procedure. The surgery site felt kind of raw in the next few days but that was the extent of my discomfort."

At her age, she says, she was assured by her doctor that nine eggs would be enough to produce three to four children in the future. "But I do wonder about the scenario where my eggs don't make it through the thawing process, or fertilization, or implantation. I'm actually considering a second round because if the time comes that I would have to tap into my frozen eggs, I would feel so much better about getting eighteen tries than nine. I'm still thinking about it," she shares.

But overall, Sam says the decision to undergo the procedure has given her a new



Assisted reproductive technology (ART) has given women the possibility of having children later in life.

\*In some cases, provided the patient is regularly menstruating, doctors can prescribe what's known as a Natural Cycle IVF, in which no hormone medication is administered.

sense of security. “I can’t possibly put a price on having children and the peace of mind this procedure has brought me. And frankly, I don’t feel it was physically all that challenging.”

Egg freezing is also a viable option for cancer patients who may be required to undergo certain operations that could affect the reproductive system. If they wish to have children later on, they can tap into their egg cell reserves.

**Success rate:** Most clinics now use a fast freezing process known as vitrification to keep the eggs in good condition.

Vitrification uses liquid nitrogen to avoid damaging the cells. “Before, they did slow freezing, which is like placing it in the refrigerator,” Dr. Mendiola of KRBC explains. “If you have a soda bottle in the freezer, it can explode, because ice has a bigger mass. The same thing can happen to cells. Vitrification is an improvement because the super fast freezing does not form ice crystals. So when you thaw the egg, you have a higher survival rate.”

According to a 2013 study by the Society for Reproductive Medicine and the Society for Assisted Reproductive Technology in the U.S., “There is good evidence that fertilization and pregnancy rates are similar to IVF/ICSI [intracytoplasmic sperm injection] with fresh oocytes when vitrified/warmed oocytes are used as part of IVF/ICSI in young patients,” though some data shows decreased success in women of advanced age, possibly due to the natural decline of a woman’s fertility.



In vitrification, egg cells are frozen using liquid nitrogen to keep them in good condition.

“Of course, when you’re in your forties and above, it will get harder to get pregnant, because like I said, egg quality deteriorates. So better if you’re younger; do it sooner,” notes Dr. Mendiola.

**How much it costs:** The cost of egg freezing services today ranges between P130,000 to P150,000. The total price largely depends on the amount of medication you’ll need to take, but already includes a one-year storage fee (P20,000). The annual storage fee for succeeding years is P11,200.

### Surrogacy

**What it is:** There are some instances when a woman does not have the physical capacity to bear children. Diseases such as cancer may require surgery that severely affects, or totally removes, a woman’s reproductive system. Other women may have a history of recurrent miscarriages due to uterine or ovarian abnormalities. For such patients, surrogacy may be their best bet.

Generally speaking, surrogacy is the practice of tapping a third party to carry a couple’s child. However, this is still not practiced nor offered by doctors in the Philippines. “We don’t have any laws pertaining to that process. So you may do it, it’s not illegal, but there are no laws that can protect surrogates or couples,” explains Dr. Mendiola. He goes on to say that the Philippine Society for Reproductive Medicine, of which he was President, “came up with guidelines, and it’s stipulated there

## A.R.T. IN HOLLYWOOD

Celebrities struggle with infertility, too. Here are their stories.



### KIM KARDASHIAN WEST

Due to complications during her first pregnancy, with daughter North in 2012, which severely damaged her uterus, the reality star and husband, Kanye West, underwent IVF to conceive their son, Saint, in 2014.

Kim is reportedly considering getting a surrogate should she and Kanye decide to have another child, as revealed in a 2016 episode of her family’s reality show, *Keeping Up With the Kardashians*.



### COURTENEY COX

In the hit show *Friends*, Courteney’s character, Monica Geller, and her husband, Chandler Bing, both dealt with fertility problems.

This storyline was actually loosely based on the actress’s own battle with infertility in real life. Courteney suffered several miscarriages but ultimately, at 39, she and now-ex-husband David Arquette had their daughter Coco, who was conceived through IVF.



### SARAH JESSICA PARKER

The *Sex and the City* star was already in her late forties when she and husband Matthew Broderick decided to give their first-born, James Wilkie, who was conceived naturally, a sibling.

The couple tried, but failed, to conceive the natural way. They eventually decided to get a gestational surrogate and welcomed twin girls, Tabitha and Marion, in 2009.

that we do not perform donor IVF, whether sperm or egg. Nor do we do surrogacy.”

He notes, however, that there are ongoing discussions among stakeholders about the possibility of allowing surrogacy to be practiced locally. “I think that’s a good start because there are really medical indications for surrogacy.”

What course of action, then, do fertility specialists take when they meet patients who are qualified for surrogacy? “What we can do is refer you abroad, to centers that do that,” says Dr. Mendiola. Local fertility clinics usually have partner clinics abroad for these cases.

There are two forms of surrogate conception.

**1 Traditional surrogacy.** This is when the sperm taken from the intended father fertilizes the surrogate mother’s egg, usually through IUI. As a result, “The woman carrying the baby is the genetic and biological mother, also known as the ‘bio mom,’” writes Steiner in *The Baby Chase*.

The potential trouble with this setup is that some surrogates, who, in these cases, are the biological mothers, can “suffer grief and doubt during the pregnancy, and long after relinquishing the child—a deep regret and guilt akin to the sorrow felt by mothers who give up babies for adoption.” Incited by such feelings, surrogates can run after intended parents in an attempt to regain rights over their children. And if it turns into a legal case, the court will rule in favor of the surrogate.


“Under the current law, the one who gives birth is the mother,” says Dr. Mendiola. “So even if you have a contract, if you go to court, the court will recognize the woman who bore the child as the mother.”

**2 Gestational surrogacy.** This form of surrogacy works like IVF—meaning the embryo is 100 percent genetically related to both intended parents, but is implanted in another woman’s uterus. A potential downside, notes Steiner, is the additional cost of the IVF procedure.

In some cases, couples can opt to tap an egg donor separately from the surrogate. This means the resulting embryo will not be biologically related to either the intended mother or the surrogate.

**Success rate:** According to Sensible Surrogacy, an international surrogacy consultancy firm based in Nevada in the U.S., success rates vary depending on surrogacy type.

When the sperm donor has been thoroughly evaluated medically, and both the egg donor and surrogate are young and



“If you feel you need medical intervention to help you have children, go for it,” says IVF mom Dada Mabanag-Bautista. “Do not delay because our body clock also has a lot to do with the success of the procedure.”

have positive fertility histories, there will be a 55 to 65 percent chance for pregnancy.

On the other hand, in cases where the intended mother donates her own eggs for the procedure, chances for a successful pregnancy go down to around 15 to 20 percent. “These cases are typically very high risk, since the couple often has a long history of failed pregnancies, and the egg donor is typically much older than what is recommended,” notes the consultancy firm on its website.

**How much it costs:** Because surrogacy involves a third party, intended parents have to pay more.

To give you an idea about the amount of money demanded by surrogacy, here’s a breakdown based on Steiner’s research: agency fee (\$15,000; \$2,000 additional for international clients); surrogate fee (\$20,000 to \$30,000 depending on the state she lives in, and how many times she has been a surrogate); surrogate expenses (\$45,000 to \$65,000), which includes attorney’s fees, allowance for psychological counseling and support groups, maternity clothes, travel expenses to meet with the intended parents and for doctors’ visits, plus miscellaneous costs; among others.

Factoring in additional expenses, the total cost of surrogacy (at least in the U.S.) can reach as much as \$100,000 to \$200,000 (P5 to P10 million). This amount can still go higher. According to Steiner, “There are cases where the total expenses for a surrogate pregnancy and neonatal care have run north of \$500,000.” That’s a

whopping P25 million. And insurance does not cover these services yet.

## SENSE OF HOPE

Assisted reproductive technology, in general, has been practiced in the West since the 1970s. It was established in the Philippines in the early ’90s by the pioneers of reproductive medicine in the country, though it was only in recent years that it started gaining considerable attention locally.

Dr. Mendiola estimates that the rise in the number of patients was most noticeable beginning 2013. He and his team at KRBC conduct an average of 50 consultations per day. “We usually start at 8:30 a.m. and we end at around 3:00 to 3:30 p.m. Sometimes we go beyond that,” he says. “So I would say that’s a lot because, before KRBC, I did infertility consultations in other medical facilities as well, but I wouldn’t get the same number.”

Why are more people drawn to ART? Dr. Mendiola posits that it is the sense of hope that these procedures bring, realized through generally positive outcomes. “I guess because of the number of patients who had good results—they pass it on; they spread the word,” he says.

Many couples dream of having children of their own, so it can be difficult to deal with a concern as personal and complex as infertility. But knowing that these options exist can somehow ease any hopeful parent’s anxieties.