





of Women of Australia	5
Contraceptive options for Australian women - Professor Gab Kovacs	6
Recent research	. 11
History of contraceptives - Doctor Terri Foran	.12
What now in contraception - Doctor Neisha Wratten	. 16
Being a busy girl - Bianca Dye	. 20
Contact details	. 23

This booklet is a good guide to contraception options however does not replace the advice of your doctor.



National Council of Women of Australia

Message from the National Council of Women of Australia:

Knowledge is choice. Contraceptive options range widely – from the natural rhythm method, to male vasectomy and the latest non-daily methods of hormonal injections and implants. It is vital that information is available for women to make informed choices regarding all possible methods – if they wish.

The National Council of Women of Australia is a non-sectarian, non-party political, volunteer organisation that first met in Australia in Sydney in 1896. Affectionately nicknamed 'Stirrers with Style', they have continued to meet regularly in six States and the ACT ever since. Through its national network of Standing Committees in the areas of Communication, General Well-Being, Social Issues, Status of Women, and Sustainable Development, the National Council of Women works to address issues of concern to all women and their families and acts as a voice or agent of communication on an Australia-wide basis.

Now read on...

Leonie Christopherson AM President

5



To keep up with the developments of the 21st century, there are now many contraceptive choices available making it more likely that couples will take appropriate precautions and unwanted pregnancies can be avoided.

However, there still is not, and probably never will be, a "one method fits all". Couples need to choose the most suitable method to suit their lifestyle and, as no one single method is perfect, users have to weigh up the risks and benefits when they choose their favourite method

The points that need to be considered include effectiveness, user participation, other benefits, side effects, reversibility and cost.

NON-DAILY METHODS

(Three years or longer)

If the most important thing for you is to have a method in place that is effective and you do not have to worry about for some years, then a long acting method is the method of choice.

Implants

This method consists of a small implantable rod, about the size of a matchstick, which contains a hormonal dose and is inserted by a doctor just under the skin. The rod contains a progesterone-like hormone called etonogestrel that's released into the blood stream at a steady rate, and circulates round the body to inhibit release of eggs from the ovaries. Once in place the implant is left for three years and is highly effective

with a success rate greater than 99%. Implants have been available in Australia since 2001 with over 300,000 women having chosen this method.

Advantages:

- Convenience not having to remember to take anything
- · Long duration of use
- Reliability
- Fertility returns quickly upon removal of implant

Disadvantages:

 Menstrual cycle is altered and some women have irregular periods

Cost:

\$5-\$25 every three years plus cost of insertion, which is partly refunded by Medicare

IUDs

There are two intrauterine methods available; the Intrauterine Device (IUD) which contains copper and the Intrauterine System which releases a progesterone hormone into the uterine cavity.

These two methods are usually reserved for women who have had children and can be left in place and be effective for five years, though the woman is advised to check that the string is felt in the vagina after each period.

Advantages:

- Fertility returns quickly upon removal of the device
- Intrauterine System can make bleeding much lighter

Disadvantages:

- IUDs can result in heavier and more painful periods
- IUDs have been associated with pelvic infection and should be used in a mutually monogamous relationship

Cost:

IUDs: \$25-\$85 every five years Intrauterine System devices: \$30 Partial cost of insertion of device can be claimed from Medicare

(Three monthly) Injections

Injections provide cover three-months at a time and unlike implants, which release a steady hormonal dosage, the levels immediately after the injection are initially high, and then decrease over the three month period, at the end of which they need replenishing.

Advantages:

- Injections only have to be given once every three months
- Highly effective

Disadvantages:

- Menstrual pattern is always disrupted, resulting in absence of periods
- Return of fertility can be delayed for some months after the last injection
- Concern about effects on mineral content of bone by long-term users

Cost:

\$25-\$35 every three months

PERMANENT METHODS

Sterilisation

For couples who no longer desire to have children and are 110% certain of this, permanent methods, called sterilisation can be considered.

When performed on the male, it is called vasectomy, for the woman the blocking of the fallopian tubes is called tubal sterilisation and is usually performed as a day procedure.

By definition sterilisation is irreversible, and whilst it is highly effective (less than 1% fail) some couples regret sterilisation, particularly if their circumstances change.

It also involves the cost of a surgical procedure.

Advantages:

Permanent

Disadvantages:

- Irreversible
- · Inconvenience of surgical procedure

Cost:

\$500-\$2500

DAILY METHODS

There are two types of pills available in Australia – the combined pill and the mini pill.

Combined Pill

The most commonly used contraceptive method in Australia is the combined pill. This pill contains the hormones oestrogen and

progesterone and is taken daily for 21 days followed by a seven day gap. During the gap a hormone-free sugar "reminder" pill may be taken and it's during this time that menstruation usually occurs.

If the pill is taken properly it's about 99% effective, though this figure decreases if pills are missed or instructions are not followed with respect to missed pills, illness or the taking of other medications.

Not all women can take the pill; those who have had blood clots, a clotting tendency, hormone dependent tumour, high blood pressure, diabetes or are heavy smokers, especially over the age of 35 should consider alternate methods

Advantages:

- Periods can be regulated and programmed
- Quantity and pain of menstruation usually decreases
- Skin conditions such as acne can improve
- Fertility usually returns quickly after ceasing to use the pill
- Risk of ovarian and uterine cancer decreases with ongoing use

Disadvantages:

- Has to be taken daily
- Small increase in the risk of breast cancer for long term users
- Increased, though very rare, association with liver tumours

Cost:

\$1-\$20 per month

Mini pill

The mini pill is a progesterone only pill which contains no oestrogen and only a small amount of a progesterone-like hormone, so rather than inhibiting ovulation it thickens the cervical mucus and thereby blocks the passage of sperm through the neck of the womb (cervix).

With correct use it's about 97% effective, though the menstrual cycle is often disrupted.

There are virtually no contra-indications to its use and they are most often used by women whilst breast feeding though should be considered as a possible second choice contraceptive.

Advantages:

- · Fairly effective
- Fertility usually returns quickly after ceasing to take the mini pill

Disadvantages:

 Has to be taken daily, at almost the same time each day (with a leeway of less than 3 hours)

Cost:

\$1-\$5 per month

COITUS RELATED METHODS

Condoms

The emergence of HIV and AIDS brought a lot of publicity to the use of condoms – the most important fact being that an intact condom is an excellent form of contraception and barrier to the transmission of sexually transmitted infections.

Not only does this include well known sexually transmitted infections such as gonorrhoea, syphilis, and HIV, but also Chlamydia, herpes and wart virus (which is the chief suspect in causing abnormal smear tests and possibly cervical cancer).

People with changing sexual partners are strongly recommended to always use condoms

Their effectiveness depends upon correct use, in that they must be used before any sexual contact and they must be properly applied.

Advantages:

- Highly effective form of contraception
- Barrier against sexually transmitted infections

Disadvantages:

 Has to be applied during lovemaking and may interfere with spontaneity

Cost:

Up to \$1 each

Female condom

The "Female condom" acts as a vaginal liner and is inserted by the female partner. These are rather more expensive than condoms and have not reached popularity.

Diaphragms and cervical caps

Other barriers which are less effective and more difficult to use include diaphragms and cervical caps. These methods have to be medically fitted but do have the advantage of being inserted some hours prior to intercourse. Diaphragms have a failure rate of about 20%

NATURAL METHODS

The theory behind using "Natural Family Planning" (NFP) is to avoid intercourse around the time of ovulation. The use of NFP requires strong will-power to prevent sexual contact when fertility is suspected and the most popular method is the "Billings" method which follows the mucus changes in the vagina. This method can be supplemented by home urine hormone measurements.

Advantages:

- No interference with natural menstrual cycles
- Fairly effective if monitoring of changes is consistent

Disadvantages:

- Days for intercourse are limited
- Overall failure rate quite high
 compared to other methods

Cost:

Free

In summary, consider all available methods on the "contraceptive shopping list" work out your priorities, and select a method that is most suitable for your current way of life.

Professor Gab Kovacs

Recent research

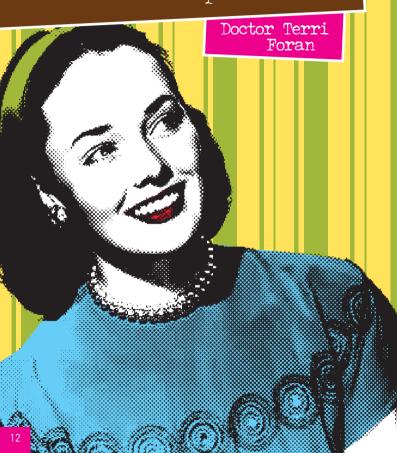
- Just over 85% of Australian women aged 18-44 find the methods of contraception available today are easier to use and more reliable than they were 20 years ago.
- Six-in-ten Australian women aged 18-44 (56%) use some form of contraception¹.
- It has been revealed that 8 out of 10 Australian women aged 18-44 would find a contraception method they didn't have to take on a daily basis appealing.

- Almost half of Australian women aged 18-44 find the concept of using a reliable and effective long-term contraceptive implant appealing.
- Close to half of those Australian women aged 18-44 taking the oral contraception pill miss taking the pill once or twice a month.

This Newspoll study was conducted in April 2006, by telephone, among a representative sample of 483 females aged 18-44 nationally.

¹ Including the oral contraceptive pill, condoms, a contraceptive implant, hormonal injections, an IUD, or a diaphragm.

History of contraceptives



For as long as humans have had sex they have sought effective means of reducing the risk of unplanned pregnancies.

The ancient Egyptians made contraceptive vaginal pessaries from dates, crocodile dung, acacia gum, honey and wool, or used herbal concoctions to terminate pregnancy.

Hebrew texts also showed a preference for herbal remedies - the so-called "cup of roots" was commonly used by concubines to avoid pregnancy. There was also Onan whose turn in Genesis 38 makes him one of the most famous exponents of the art of coitus interruptus when he spills his seed upon the ground in order to avoid impregnating his widowed sister-in-law.

The ancient Romans recommended the wearing of a dead spider enclosed in a deer skin pouch and attached to a woman's waist before sunrise whereas the Persian physician Avicenna suggested the "avoidance of coition at the time that most favours conception". Unfortunately, though. he failed to specify precisely when this was! Avicenna also gave us an emergency method - sneezing violently after sex and then jumping backwards nine times to expel the sperm. It was apparently important to follow the directions exactly, as iumping forwards was said to increase the chances of pregnancy.

The wise women of the Middle Ages preferred magic and recommended wearing amulets, around the waist or neck, that ranged in style from a weasel's foot to a wad of mule's ear wax or the old favourite, the bone from the right side of a black cat.

Over in Eastern Europe the penchant was for walking three times around the spot where a pregnant wolf had urinated. Certain challenges, however, were inherent in this - firstly finding the exact spot, secondly ensuring the wolves had already left and thirdly avoiding the crowds of women with similar intentions!

Condoms

16th century Italian anatomist Gabrielle Fallopius (of Fallopian Tube fame), developed the penile sheath. made from sheep gut or waxed linen, as a means of preventing both pregnancy and sexually transmitted infections. These forerunners of the modern condom were extremely expensive and designed to be laundered and used many times and popularised by Casanova who was said to have tied his on with a pink ribbon. No nation, though, was clamouring to claim the condom as their own, with the French calling it the "English overcoat" and the English referred to it as the "French letter" The development of latex in the 19th century brought much cheaper. effective and consequently more readily available condoms, becoming one of the few effective methods of contraception available to the general population. It is sobering to realise though, that it wasn't until the 1960s that is was legal to advertise or display condoms in the United States or Canada

Diaphragms

The first vaginal barriers were made of natural products adapted from locally available items such as halved citrus fruits placed in the vagina, which were effective for their barriers to sperm and for their natural spermicidal properties. In Hungary women used molded beeswax and in China balls of opium resin. The modern diaphragm was developed by a German physician in the 1870s although became known as the "Dutch Cap" due to its popularity in Holland.

Intrauterine Devices (IUDs)

The first IUDs may well have been the smooth stones introduced by ancient Arab traders into wombs of their female camels to prevent them getting pregnant on long desert journeys, though the immediate forerunner of the modern IJID was the intracervical device, which was widely used by wealthy women during the 1930s and 40s. These were made of ivory, platinum, silver or gold, were placed within the cervical canal prior to intercourse. The first intrauterine device was developed in Germany during the 1930s and made of fine silver wire coiled around a core of silkworm aut, though it was not until the development of plastic IUDs in America, during the 1960s, that the method became more widely used.

Hormonal Contraception

Herbal potions have long been a favourite to prevent conception and Greek herbalist Dioscorides wrote of the herbs such as ergot, pennyroyal, and chaste berry to bring on a period that was overdue. The eating of asparagus was said to "make a woman barren and not fit for generation", and Heliotrope was said to possess properties to "move ye menstrus and expel ye embrya". Women in pre-Colombian Mexico used the root of a wild yam called Barbasco whereas those in New Brunswick drank a potent brew of beaver testicles steeped in alcohol.

The development of modern hormonal contraception is due largely to American activist Margaret Sanger who despaired at the number of women dving from the complications of illegal pregnancy terminations in the urban poor areas of New York. As early as 1912 she wrote of a "Magic Pill" which would provide women with effective contraception but realised that scientific knowledge at that time could not support its development. By the 1950s, though, scientists had been able to develop a number of steroid compounds that showed promise as contraceptive agents. Because of the controversial nature of the project none of the major pharmaceutical companies of the time had shown much interest in developing the concept further and it was Sanger who lobbied to endow a private Research Foundation to develop and conduct the initial oral contraceptive pill studies, 1959 saw the very first pill. Enovid, approved for use in the United States and the following year in Australia.

The 1960s was a time of immense social and political upheaval that saw the rise of feminism and concepts of equal opportunity for women. The pill meant that for the first time in history women were able to take control of their reproductive potential – deciding with some certainty when they had children, or indeed whether they had children at all.

The Future

We have come a long way since the 1960s and Margaret Sanger's concept of a single contraceptive method.

Forty-five years on there is an acceptance that a range of alternative contraceptive options, both new and old, are needed to accommodate the widely differing needs of the twenty-first century woman.

One really interesting development has been the relatively high number of longer-acting hormonal contraceptive methods now available including such methods as implants and injectables. This, perhaps, represents an increasing demand for effectiveness and convenience in an increasingly busy and demanding world.

We now have methods of fertility control with levels of effectiveness that our ancestors could only have dreamt of – I suspect they would have thought it all truly magical.

Doctor Terri Foran







Hormonal contraception in Australia and I are the same age – so I believe I can say that as a doctor I have actually grown up with contraception.

It is sobering to realise that in today's modern world, between 1995 and 2000, 1.3 billion women aged between 15 and 45 years had more than 1.2 billion pregnancies with more than a quarter of these being unplanned. Of these unplanned pregnancies, more than half ended in terminations that weren't always performed in safe conditions, some resulting in sad consequences.

Reports such as this lead us to believe that our current methods of contraception still leave something to be desired.

When thinking about women's needs for birth control several factors are important to consider – cost, effectiveness, reversibility, ease of use, personal control, lack of interference with intercourse and normal menstrual bleeding.

Today the oral contraceptive pill is the most common method on the market due to its perceived reliability, although it can fail due to inconsistent or incorrect use. Long acting contraceptives, which don't require a daily action, may well be the answer to some of these issues.

OLD FRIENDS, NEW WAYS

The oral contraceptive pill has been available in Australia for 45 years and over that time has continued to be developed to ensure long term safety and effectiveness.

Continuous use of the pill is often proposed to ensure satisfaction, reduce failure rates, regulate bleeding and manage symptoms such as headaches, pains and breast tenderness that plague so many women.

The oral contraceptive pill, most commonly used today, contains two hormones, that when combined, inhibit ovulation and allow a regular bleeding pattern.

New products are being developed to administer these hormones in longer-acting forms, like the hormonal implants and injections already available, as opposed to daily methods that will allow for greater ease of use.

These are some of the products available overseas that we can expect to see in Australia soon:

Patched

Some products we will soon see include patches that contain hormones which are released at a measured daily dosage. These patches can be worn on the abdomen, buttocks, upper arms, upper chest (except for the breast) and are applied weekly for three consecutive weeks followed by a 7 day break. The failure rate of patches is generally low, though concerns have been raised regarding its efficacy in overweight women.

Rings

Another product soon to hit our shores is a soft vaginal ring which releases a measured lower dosage of hormones and works in a similar way to the pill. One ring is inserted for three weeks by the woman herself and then removed for a week to allow bleeding to occur. A new ring is used every month with the effectiveness and satisfaction being similar to that of the oral contraceptive pill.

Just to recap on non-daily methods available in Australia:

Implants

The only implant currently available in Australia is a single rod that contains a hormonal dose. The match stick sized rod is inserted just under the skin of the upper part of the arm and provides highly reliable protection against pregnancy for up to three years.

Since its introduction in 2001, over 300,000 Australian women have chosen this implant as their method of contraception. When surveyed, Australian women gave many reasons for choosing the implant as their preferred method of contraception including convenience, nothing to remember, the long duration of use and its high reliability.

Intrauterine Devices (IUDs)

The hormonal IUD that's available in Australia has done much to restore women's faith in this method of contraception. Copper based IUDs have always been an excellent form of contraception, with success rates comparing favourably with pill.

The IUD is a T-shaped device which contains a hormonal dose which is steadily released over a period of five years. The IUD has to be inserted and removed by a trained doctor, but once inserted can be left alone for the duration.

Many women have been reluctant to use IUDs due to the risks of pelvic infection; however, research shows that the likelihood of infection falls drastically a few weeks after insertion.

Injections

Injections have also been available for quite some time now and these are only required once every three months to provide effective protection. While effective and convenient, there is some concern that hormonal injections may reduce bone mineral density. A return to fertility will take up to 12 months after stopping the last injection.

The injection is given into the muscle and can be rather uncomfortable, however, a new subcutaneous form has been developed which will be considerably less painful. Spotting and weight gain have also been known to occur.

FOR THE BOYS.....

Despite what we may hear at social gatherings, it appears that men and women are really enthusiastic about the male hormonal contraceptive.

It seems that the method with the most potential consists of a hormonal implant which will shut down sperm production. Unfortunately this does make some men impotent and so has to be counteracted by a dose of testosterone. Despite some promising results, there are still some problems in the development of this method and so it may be some time before we see a product for the boys.

AND IN CONCLUSION

At the age of 45, hormonal contraception in Australia has certainly reached its maturity and with maturity comes responsibilities.

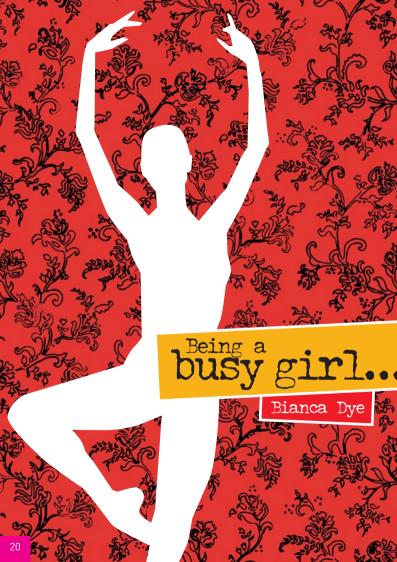
There is no doubt that users of contraception take a responsibility to use their chosen method correctly and, as doctors we have a responsibility to ensure that our patients receive as much information as possible on all the methods available as well as providing quidance and support.

Doctor Neisha Wratten

"The management of fertility is one of the most important functions of adulthood".

Germaine Green







Contraception is one of those things that, as an adult, we all have to take responsibility for. No one is going to organise it for

us and it's definitely worth doing the research on what the best method is for your lifestyle.

It's all about Choices!

Choosing the right method means things are less likely to go wrong and no woman ever wants to go through that moment of realisation that something unplanned has happened!

Your lifestyle plays an important factor in determining what type of contraception best works for you.

Like many women today I lead a busy life (sometimes way too busy) and

like most busy people sometimes it can be inconvenient to have to remember to take a daily pill, especially for those who travel frequently. There's nothing worse

than remembering that you forgot to take your pill after the event!

Today, things have changed and whilst they haven't invented a pill for the bloke (do you ever get the feeling that contraception options were first designed by, well, blokes?!!), there are a whole range of new options since the pill became available some 45 years ago.

For example, if you're pretty bad at taking the pill then it might make sense to consider a non-daily contraceptive, something that you can forget about and get on with trying to deal with all the hurdles a modern woman faces.

For example, there are patches; you need to replace the patch weekly for three consecutive weeks and then take it off for the fourth week before repeating the process (just don't forget to put the right one on if you are also trying to give up the ciggies!).

Another new form of contraception is an implant that covers you for three years before it has to be replaced and you don't have to do anything at all. What a cool concept, not having to worry about contraception for three years. The implant is a little rod, the size of a matchstick, that is slipped under the surface of the skin on your upper arm and once in, you barely notice it exists.

Obviously friends can be a great source of information but the best tip I can give you is talk to your doctor. They can provide you with all the options as well as work out, in consultation with you, what is the best fit for you, your partner and your lifestyle.

Bianca Dye

NOVA radio presenter and media personality





