What's new in contraception?

The following questions can be used as discussion points for peer groups or self-reflection of practice. The questions for this peer group discussion relate to the contraception article series. It is strongly recommended that the linked articles are read before considering the questions.

- "Contraception: which option for which patient" **www.bpac.org.nz/2021/contraception/options.aspx**
- "Condoms: advising on the options" **www.bpac.org.nz/2021/contraception/condoms.aspx**
- "Oral contraceptives: selecting a pill" **www.bpac.org.nz/2021/contraception/oral-contraceptives.aspx**
- "Depot medoxyprogesterone acetate (DMPA) injections: an intermediate option" **www.bpac.org.nz/2021/contraception/depot.aspx**
- "Long-acting contraceptives: implants and IUCs" **www.bpac.org.nz/2021/contraception/long-acting.aspx**

Prescribing contraception is a core part of primary care practice. A patient's co-morbidities and concurrent medicines can influence the balance of risks and benefits and therefore the choice of contraceptive. Publication of New Zealand Aotearoa's guidance on contraception by the Ministry of Health (Dec, 2020) is likely to have an increasing impact on the contraceptive choices made by both clinicians and patients.

Condoms are an effective method of contraception provided they are used correctly on every occasion of sexual intercourse. Condoms are also effective at preventing transmission of most sexually transmitted infections (STIs), including HIV, gonorrhoea, chlamydia and hepatitis B. They can also provide some protection from dermal or oral transmission of STIs, although this risk is not eliminated as they may not cover all infectious areas. Condoms should therefore be offered in addition to other contraceptive regimens for anyone at increased risk of STIs, i.e. unless the person is in a monogamous relationship where both partners do not have any STIs. Condoms should be routinely and widely offered in primary care to ensure equitable access.

Long-acting reversible contraceptive methods, such as the levonorgestrel implant or intrauterine contraceptives (IUCs), are now recommended as a first-line choice for people of all ages, including adolescents. These methods have the highest rates of effectiveness of the available contraceptive options and are recommended particularly for patients who want a "fit and forget" approach to contraception and who do not wish to become pregnant for a number of years. Clinicians require training for insertion of both the implants and IUCs.

Levonorgestrel implants are the most effective form of reversible contraception and can provide protection for a period of up to four or five years (depending on body weight). Levonorgestrel implants are inserted sub-dermally under local anaesthetic in the inside of the upper arm. They are generally well tolerated but can have variable effects on bleeding patterns.

Copper intrauterine devices (IUDs) may initially cause heavier bleeding, whereas levonorgestrel intrauterine systems (IUSs), e.g. Mirena, reduce bleeding and are now funded for contraception. If heavier and more painful menstrual bleeding occurs with a copper IUD, advice should be given that this typically improves after the first three months and most people report being satisfied with this contraceptive method. Although not listed as a contraindication in most guidelines, the use of a copper IUD may not be ideal in patients who already have heavy, painful menstrual bleeding. Levonorgestrel IUSs reduce menstrual bleeding and one-half to two-thirds of patients report lighter and less frequent bleeding within three months of use.

New Zealand guidance recommends that use of some IUCs can be extended in some patients, without affecting contraceptive efficacy. Patients who have a Mirena inserted for contraception or heavy bleeding at age 45 years or older can extend use for seven years or until menopause* if amenorrhoeic. Patients who have a copper IUD inserted after age 40 years may continue to use the same device until menopause; the device should be removed when contraception is no longer required. Extended use of IUCs in younger people is not specifically endorsed by the Faculty of Sexual and Reproductive Healthcare, United Kingdom (basis of New Zealand contraception guidance).

* In general, natural loss of fertility can be assumed at age 55 years; spontaneous conception after this age is extremely rare even in those who still have menstrual bleeding

Oral contraceptive pills are a safe and effective contraceptive method widely used in New Zealand. They are available in two formulations, a combined ethinylestradiol/progestogen pill and a progestogen-only pill (POP). Combined oral contraceptives (COCs) are generally the first-line choice for those who wish to use an oral contraceptive, unless oestrogen use is contraindicated. This is because COCs require less strict adherence to regular dosing times than POPs and provide additional non-contraceptive benefits.

A reasonable option for a first-time COC user is 30 – 35 micrograms ethinylestradiol with either 150 micrograms levonorgestrel or 500 micrograms norethisterone. A lower dose of ethinylestradiol is recommended for older patients, e.g. aged > 40 years. The choice of oral contraceptive may also be influenced by whether the patient seeks non-contraceptive benefits from the medicine, e.g. a formulation containing cyproterone may be appropriate for a patient

with acne or polycystic ovary syndrome, however, the benefits should be weighed against the higher VTE risk.

COCs are typically taken in a regimen of 21 "active" hormone pills followed by a hormone-free interval of seven days, during which withdrawal bleeding occurs. However, there is no evidence to support any health benefits from having a monthly withdrawal bleed and lengthening the hormone-free interval can increase the risk of pregnancy. Many women already run up to three packs together ("tricycling") to avoid withdrawal bleeds or oestrogen withdrawal symptoms. Recent guidelines have now extended this concept to continuous use, i.e. the hormone-free interval is omitted and active hormone pills are taken continuously. There is no evidence that this is unsafe. There is an increased risk of breakthrough bleeding when pills are taken continuously, but this declines with time. If breakthrough bleeding persists for three to four days when taking pills continuously, the pills should be stopped for four days and then resumed. If patients do not wish to omit the hormone-free interval completely, another option is to shorten this period from seven to four days. This reduces the chance of return to ovarian activity and therefore may decrease the risk of contraceptive failure, e.g. if pills are missed.

A further recent change in advice concerns post-partum use of COCs. Traditionally COCs have not been prescribed until six months post-partum. Guidelines now advise that they can be started from six weeks post-partum provided breastfeeding is well established and there are no concerns with the infant's growth. Mothers who are not breastfeeding can start a COC from three weeks post-partum provided there are no other risk factors for VTE (e.g. caesarean delivery, haemorrhage or transfusion at delivery, smoking, BMI ≥30 kg/m^2). If any of these additional risk factors are present, the COC should not be started until six weeks post-partum.

Depot medroxyprogesterone acetate (DMPA) injections are a highly effective form of contraception and are usually well-tolerated. In approximately 50% of women they result in amenorrhoea, however, some report problems with irregular or prolonged bleeding and weight gain. Despite these risks and the potential for a delayed return to fertility when stopped, DMPA injections are a preferred method of contraception for many people as they do not rely on daily adherence or require an insertion procedure. Due to an association with a reduction in bone mineral density, they are not recommended as a first-line contraceptive method in those aged under 18 years or in any woman with risk factors for osteoporosis. New Zealand guidelines recommend a dosing interval of 13 weeks; this is an evidence-based change from the previously recommended 12 week dosing interval.

Questions for discussion

1. Ensuring consistent and correct use are the most important considerations when providing patients with condoms. Do you have a range of condoms in the practice to provide to patients (obtained on a Practitioner's supply Order)? When prescribing condoms, do you ask patients about their previous experience with size or fit? Do you tend to specify a particular brand or size on the prescription or leave this up to the pharmacist to discuss?
2. Do you routinely offer patients information about long-acting contraceptive methods, i.e. implants and IUCs? Would you be more likely now to consider use of an IUC in young nulliparous women given that traditionally they were not widely used in this group? Do you find that women are satisfied with these forms of contraception? What are some of the issues you have encountered with their use?
3. Do you (or someone at your practice) regularly insert IUCs or implants? If not, do you think this should be considered now that the long-acting options are recommended first-line? Is insertion training available in your area?
4. National and international guidance now recommend that some IUCs can remain in situ for extended durations, e.g. some copper IUDs for up to 12 years and the current funded brand of levonorgestrel IUS for up to seven years. In your experience are most patients comfortable with leaving an IUC in place for an extended time? Given that the possible extended durations vary with the brand of IUC, do you have effective documentation and recalls in place on your practice management system to ensure that IUCs are removed at the correct time?
5. Were you aware of the changes in guidance regarding continuous use of COCs? Have you found patients receptive to the idea? Do you think there are still concerns among both patients and clinicians about the safety of this practice?
6. The change in advice regarding when a COC can be started post-partum may also be new for many clinicians. Were you aware of this change in guidance? If not, after reading this article will this change your practice?
7. Our new national contraceptive guidelines now recommend a 13 week dosing interval for DMPA injections rather than 12 weeks as in previous guidance. Were you aware of this evidence-based change in practice prior to reading the articles? Have you found patients to be accepting of the change in timing or to be concerned about effectiveness?