Contraception and its ethical considerations

Sinead Morgan
Shreelata Datta

Abstract

Access to appropriate contraception not only has direct benefits for women's health and wellbeing but also has a broader positive impact on society as a whole. Obstetricians and gynaecologists play a key role in counselling women. Decisions regarding contraceptive choices must take into account women's preferences, cultural and religious beliefs as well as any co-existing medical issues.

This article outlines three commonly encountered scenarios and the ethical and legal issues that may affect the choice of contraceptive.

Keywords adolescent gynaecology; contraception; emergency contraception; ethics; sterilisation

Introduction

The availability of effective contraception not only reduces the number of unsafe abortions but also allows women to plan the size of their family and space their pregnancies. Teenage pregnancy has a well-documented association with infant mortality, poor access to education, poverty and poor maternal emotional health and the UK still has one of the highest teenage pregnancy rates in Europe. Women in the UK currently have access to a wide range of contraceptive choices and need comprehensive information regarding their options to enable them to choose a method and use it effectively.

Clinical assessment of women seeking contraception

History taking

Pregnancy must be excluded in any patient requesting contraception; this is aided by undertaking a detailed menstrual and sexual history. The need for emergency contraception (EC) should be assessed as part of contraceptive counselling. Sexual history is particularly important in women under the age of 25 or those who have a new sexual partner as these women are at higher risk of sexually transmitted infections (STI).

As part of the menstrual history the pattern and duration of menstrual bleeding and the desire for regular cycles needs to be established as this may indicate the need for the non-contraceptive benefits of contraception. Cervical screening history should be evaluated and screening arranged if appropriate. Abnormal vaginal bleeding should be investigated prior to commencing intrauterine contraception or hormonal contraception. A past contraceptive history should be obtained including compliance with previous methods and the presence of any adverse effects. A past gynaecological and obstetric history should be taken as well as establishing whether they are currently breastfeeding and plans for any future pregnancy.

A history of past and current medical conditions and family history should be sought and patients should be asked about migraine and cardiovascular risk factors such as smoking, obesity, venous thromboembolism, hypertension and hyperlipidaemia. A drug history including prescribed medication, over the counter medication, herbal preparations and supplements should be taken in order to assess the risk of drug interaction with hormonal methods of contraception. The UK Medical Eligibility Criteria for Contraceptive Use (UKMEC) can be used to assess whether a medical condition or current circumstances (e.g. breastfeeding, postpartum status, age) precludes the use of a particular contraceptive (Table 1).

Women with conditions that pose a significant risk to their health during pregnancy or those taking teratogenic drugs should be counselled regarding the most reliable contraceptive choices including long acting reversible contraception (LARC). A women's personal preference regarding contraception and her understanding of its efficacy, risks, benefits and the attitude of her partner toward contraception should be discussed. The importance to her of avoiding pregnancy should be explored as well as lifestyle, social, cultural or religious factors which may influence choice, acceptability and compliance with contraception.

Clinical examination

The clinical examination should include a blood pressure measurement, weight and calculation of body mass index (BMI). Women who request sterilisation, intrauterine contraception or barrier contraception (diaphragm or cervical cap) will require a bimanual examination. The presence of pathology such as fibroids may require further investigation as they may limit contraceptive choices. Routine screening for STIs is not required unless women are symptomatic or at deemed at high risk after taking a detailed sexual history. Symptomatic women and high-risk women should be offered screening.

Intrauterine contraceptives should not be inserted in symptomatic women until they have completed treatment and their symptoms have resolved. Asymptomatic women can be offered intrauterine contraception and prompt treatment can be initiated after fitting if an infection is subsequently identified.

Contraceptive counselling in young patients

Case 1

A 14-year-old girl attends the family planning clinic requesting contraception. She has been using condoms but would like to discuss alternative methods. She has no significant past medical or surgical history and does not take any regular medication.

How would you assess this patient?

A full gynaecological history including sexual history is particularly important in young women as there is a higher rate of both unintended pregnancy and STI compared to older

Sinead Morgan *MBBS BSc (Hons) MRCOG is an ST7 in Obstetrics and Gynaecology at St George's University Hospitals NHS Foundation Trust, London, UK. Conflicts of interest: none declared.*

Shreelata Datta *MD MBBS BSc (Hons) LLM MRCOG is a Consultant Obstetrician and Gynaecologist at King's College Hospital NHS Foundation Trust, London, UK. Conflicts of interest: none declared.*

UK medical eligibility criteria for contraceptive use (UKMEC)

UKMEC	Definition of category
Category 1	A condition for which there is no restriction for the use of the method
Category 2	A condition where the advantages of using the method generally outweigh the theoretical or proven risks
Category 3	A condition where the theoretical or proven risks usually outweigh the advantages of using the method. The provision of a method requires expert clinical judgement and/or referral to a specialist contraceptive provider, since use of the method is not usually recommended unless other more appropriate methods are not available or not acceptable
Category 4	A condition which represents an unacceptable health risk if the method is used

Table 1

women. A comprehensive social history with sensitive exploration of home circumstances, issues in current or past relationships may help identify children at risk.

What are the ethical issues in this case?

1. **The law in relation to sexual activity in young people and safeguarding**

The legal age to consent to sexual activity in the UK is 16, however one third of young people have already engaged in sexual activity prior to this age. Although sexual activity under the age of 16 is illegal, if there is no evidence of abuse or exploitation it is unlikely that sexual activity amongst consenting adolescents of a similar age would result in prosecution. Under the Sexual Offences Act 2003, children under the age of 13 are not deemed capable of consenting to sexual activity and in this case offences are considered more serious. Healthcare providers are considered to be protecting a child if they give healthcare advice or treatment to prevent a pregnancy or STI in children even in those under 13.

The possibility of abuse should be considered in under-16s and a risk assessment carried out. There should be a named contact that acts as local lead for child protection who can be contacted for advice where there are concerns.

2. **Capacity and consent**

In the UK capacity to consent to medical treatment or examination is presumed in those over the age of 16, below this age however capacity must be demonstrated. Children under 16 are considered competent to consent to treatment provided they have sufficient intelligence to understand fully the treatment proposed.

A person is said to have capacity if they can:

- Understand the proposed treatment
- Understand the risks and benefits of treatment and the alternatives
- Understand the implications of not having treatment
- Retain the information provided for long enough to weigh up their options and come to a decision
- Communicate the decision they have made

In the UK it is lawful to provide contraceptive advice and treatment without parental consent provided the criteria for Fraser competence are met. Fraser competency refers to a set of guidelines set out by Lord Fraser in his judgement of the Gillick case in 1985 (Table 2). This case involved a challenge to Department Of Health guidelines that allowed doctors to give contraceptive advice and treatment to under 16s without parental consent.

3. **Confidentiality**

Confidentiality is often a key concern amongst young people accessing sexual health services. Maintaining confidentiality often encourages adolescents to continue to seek advice and support when needed. Where there are concerns regarding competence, child abuse or exploitation confidentiality may have to be breeched.

What are the contraceptive options for this patient?

Young women should be counselled regarding all contraceptive options, age does not preclude them from having methods including LARC or intrauterine contraceptives. The progestogen only injection is UKMEC category 2 in under 18s due to the potential for bone mineral density loss and should only be considered if alternatives are unsuitable. Consideration needs to be given to their individual risk of STIs and their ability to comply with treatment and follow up. Contraceptive failure rates are estimated to be twice as high in women under 20, she should thus be advised that only barrier methods offer protection against STIs.

In the UK condoms and the oral contraceptive pill remain the most popular contraceptive choices amongst young people; however failure rates are higher with both these methods compared to LARCs which are less user dependent (Table 3). There is a high discontinuation rate amongst pill users often due to actual or perceived side effects; this highlights the importance of counselling regarding potential adverse effects and arranging follow up to assess compliance.

Criteria for Fraser competence

A doctor could proceed to give advice and treatment provided he/she is satisfied in the following criteria:

1. That the girl (although under the age of 16 years of age) will understand his/her advice;
2. That he/she cannot persuade her to inform her parents or to allow him/her to inform the parents that she is seeking contraceptive advice;
3. That she is very likely to begin or to continue having sexual intercourse with or without contraceptive treatment;
4. That unless she receives contraceptive advice or treatment her physical or mental health or both are likely to suffer;
5. That her best interests require him/her to give her contraceptive advice, treatment or both without the parental consent.

Table 2

Failure rate of contraceptive methods

Contraceptive	Percentage of women with unintended pregnancy within 1 year	
	Typical use	Perfect use
No method	85	85
Withdrawal	29	18
Diaphragm	16	6
Female condom	21	5
Male condom	15	2
Combined pill/progesterone only pill/contraceptive patch/ contraceptive ring	8	0.3
Depo-Provera	3	0.3
Copper intrauterine contraceptive device	0.8	0.6
Levonorgestrel intrauterine system	0.2	0.2
Contraceptive implant	0.05	0.05
Male sterilisation	0.15	0.1
Female sterilisation	0.5	0.5
Fertility awareness	24	1–9
Lactational amenorrhoea	2	0.5

Table 3

She has opted to commence the oral contraceptive pill, how would do you counsel her?

Assessing eligibility: adolescents are at lower risk of cardiovascular disease and have a lower incidence of co-morbidities compared to the general population however the UKMEC guidelines should be reviewed to ensure there is no contraindication to commencing combined hormonal contraceptives (CHC).

How to start: combined oral contraceptives (COC) contain a combination of oestrogen usually ethinylestradiol and a progestogen. They can be monophasic where all pills contain the same amount of oestrogen and progestogen or phasic where the amount of oestrogen and progestogen varies during the cycle. CHC can be commenced on day one to five of the menstrual cycle without the need for additional contraception. It can be started after day five of the cycle if it is reasonably certain she is not pregnant, however she will need to use additional contraception for seven days after starting. Criteria for being reasonably certain a woman is not pregnant include any of the following:

- No intercourse since last normal period
- Within seven days of the onset of a normal period
- Consistent and correct use of reliable contraception
- Within four weeks postpartum in non-lactating woman
- Less than seven days post miscarriage or abortion
- Nearly or fully breastfeeding, amenorrhoeic and less than six months post partum
- A pregnancy test performed no sooner than 21 days after last episode of unprotected sexual intercourse (UPSI) is negative

Pills containing oestradiol valerate, Qlaira® and Zoely®, have a different starting regime and advice for missed pills.

Missed pills:

If one pill is missed or if there is a delay of less than 48 hours in starting the new packet, the missed pill should be taken as soon as remembered and the remaining pills taken at the usual time. EC is not required unless other pills have been missed in the current packet or last week of the previous packet.

If two or more pills are missed or if there is a delay of over 48 hours in starting a new packet, the most recent missed pill should be taken and the remaining pills taking at the usual time. Additional contraception will be needed (condoms) for the next seven days.

- If the missed pills were in the first week of the packet and intercourse occurred in this week or the pill free week EC is required.
- If missed pills are in the second week of the pack EC is not required if pills in the preceding seven days were correctly taken.
- If pills are missed in the third week the current pack should be completed and active pills of the next pack commenced straight after (i.e. the pill free interval or placebo pills should be omitted) and EC is not required.

If vomiting occurs within three hours of taking the pill she should take another pill as soon as possible, if vomiting or diarrhoea persists for more than 24 hours she should follow the advice for a missed pill.

Potential side effects: the most commonly reported side effects are headache, menstrual irregularity, mastalgia, nausea and abdominal pain.

Venous thromboembolism – there is an increased risk of venous thromboembolism, 5–12 per 10,000 women years but this is lower than the risk in pregnancy which is 29 per 10 000 women years. The risk is influenced by the progesterone component of the pill. Pills containing drospirenone, desogestrel, or gestodene have the highest risk and pills containing levonorgestrel, norethisterone, or norgestimate have the lowest risk.

Cardiovascular disease and stroke – there is an increased risk of cardiovascular disease and stroke particularly in women with diabetes, migraine with aura, hypertension, BMI over 35 or a family history of cardiovascular disease.

Breast and cervical cancer – the increased risk of these cancers returns to normal 10 years after stopping COC.

There is no evidence that COC cause weight gain, depression or loss of libido but COC may improve acne and primary dysmenorrhoea.

Request for permanent contraception

Case 2

A 27-year-old woman attends requesting sterilisation. She is in a long-term relationship and has two children with her current partner both born by caesarean section. She has used barrier contraception in the past and is currently taking the progesterone only pill but now wants a more reliable form of contraception.

How would you assess this patient?

Her capacity to consent to the procedure should be assessed, and her understanding of the risks involved including failure rate checked and alternative methods of contraception including LARC and male sterilisation should be discussed. It is essential she understands that sterilisation is permanent; reversal is not always successful and is not offered on the NHS.

Where appropriate couples should be counselled together using both verbal and written information. Seeing couples together is useful as the male partner's suitability for sterilisation can be assessed. Vasectomy has a lower failure rate, is quicker and is associated with less morbidity than laparoscopic female sterilisation. Vasectomy may be more appropriate where general anaesthesia for the woman is contraindicated or where surgery in the woman may carry an increased risk of complications.

An assessment needs to be carried out to assess the couple for risk of regret. The reported incidence of post sterilisation regret varies but has been reported to be as high as 26% (Table 4).

What alternatives should be offered?

All appropriate forms of contraception should be offered based on the patient's medical eligibility and personal preferences. Women should be informed that sterilisation and LARCs do not provide protection against STI. LARCs can be used in women in whom oestrogens are contraindicated, women with migraine (with or without aura), high BMI, women who are breastfeeding and nulliparous women. They can be used at any age and can be useful in women with medical co-morbidities. Some of the LARCs are more successful in preventing an unintended pregnancy compared to sterilisation (see Table 5).

How would you consent her for sterilisation?

The risks of the surgical technique, laparoscopy or hysteroscopy, needs to be outlined in addition to the risks associated with sterilisation. Patients should be advised that the surgical risks are increased in women who have an underlying medical condition, who are obese or as in this case have had previous abdominal or pelvic surgery.

The failure rate of laparoscopic sterilisation with clips has been quoted at 2–5 in 1000 procedures at 10 years, where available, hysteroscopic sterilization has a failure rate of 2 in 1000 procedures. Women should be informed that if a pregnancy occurs following sterilisation there is a greater risk of this pregnancy being an ectopic pregnancy. The possibility of regret, the irreversible nature of the procedure and the possibility of failure to complete the procedure via the chosen method should be included on the consent form.

When should sterilisation be performed?

Sterilisation can be performed at any time in the menstrual cycle provided the woman has had a negative pregnancy test and has not had unprotected sexual intercourse (UPSI) in the last 3 weeks. If they have had UPSI in the last 3 weeks she is at risk of a luteal phase pregnancy and the procedure should be deferred until at least three weeks from the last instance of UPSI. If women are using hormonal contraceptives or intrauterine contraceptive devices these should be continued for seven days following sterilisation. The exception to this is the progestogen implant which can be removed at the time of sterilisation. If women are taking combined hormonal contraception and sterilisation is scheduled for the hormone free interval or day one of a cycle they should omit the hormone free interval and continue contraception for seven days post sterilisation.

Laparoscopic or hysteroscopic sterilisation

Hysteroscopic sterilisation using micro-implants can be performed without the need for general anaesthesia, making it an option for women in whom general anaesthesia is contraindicated or in cases where the risks of laparoscopic surgery are unacceptably high. The micro-implants cause fibrosis in the fallopian tubes resulting in permanent occlusion after three months. Tubal occlusion is assessed three months post procedure via ultrasound, pelvic X-ray or hysterosalpingogram.

The micro-implants licenced in the UK, Essure®, have recently been withdrawn from the market and therefore this sterilisation technique is currently unavailable.

Factors associated with regret following sterilisation

Young age	Sterilisation in women under 30 is associated with a increased risk of regret
Decisions taken during pregnancy	Sterilisation performed concomitantly with caesarean section is associated with a higher level of regret particularly if women feel they were coerced by healthcare professionals. Delaying sterilisation after childbirth is associated with a reduced risk of regret. Sterilisation should not be performed at the time of caesarean section unless counselling has taken place antenatally and at a time interval of at least two weeks prior to the caesarean section.
Nulliparity	The incidence of regret appears to be higher amongst couples with no children or two or less children.
Decisions taken at the end of a relationship	Not being in a relationship, being in a new relationship and conflict with a partner are all associated with regret.
Decisions involving coercion by partner, family, health or social care professionals	Pressure to undergo sterilisation due to a medical condition or pressure from a partner are associated with regret. Lack of information giving regarding the procedure and alternative methods of contraception increase the incidence of regret.

Table 4

Features of long acting reversible contraceptives

	Copper IUD (Cu-IUD)	IUS	Progestogen-only injection	Progestogen only implant (Nexplanon®)
Mechanism of action	Inhibits fertilisation via the effects of copper on the ovum and sperm. Inhibits implantation via an endometrial inflammatory reaction.	Mainly by preventing implantation via a progestogenic effect on the endometrium	Mainly by inhibiting ovulation Action on cervical mucus reduces sperm penetration Effect on endometrium inhibits implantation	Mainly by inhibiting ovulation Action on cervical mucus reduces sperm penetration Effect on endometrium inhibits implantation
Duration of use	5—10 years for devices containing 380 mm^2 of copper In women over 40 at the time of insertion it can be used until contraception is no longer required (unlicensed indication)	5 years for Mirena® IUS (52 mg LNG IUS) 3 Years for Jaydess® (13.5 mg LNG IUS) In women who are over 45 at the time of Mirena® insertion and amenorrhoeic, the Mirena® can be left in situ until contraception is no longer required (unlicensed indication)	Every 12 weeks for depot medroxyprogesterone acetate (DPMA) Every 8 weeks for norethisterone enantate (NET-EN)	3 years
Percentage of women with unintended pregnancy within 1 year with typical use	0.8%	0.2%	3%	0.05%
Procedure for initiation, monitoring and discontinuation	**Insertion** — Can be inserted at any time of menstrual cycle provided pregnancy excluded, immediately after abortion or after four weeks in postpartum patients. There may be pain for a few hours and light bleeding for a few days following insertion Women at risk of STI require screening prior to insertion **Monitoring** — Follow up is required after the first period or three to six weeks post insertion to exclude expulsion, perforation and infection, women should be encouraged to check the IUD thread regularly to exclude expulsion **Removal** — Can be removed up to day three of the cycle without the need for additional precautions If removed after day three women should abstain from intercourse or use	**Insertion** — as per Copper IUD If inserted after day seven of the cycle additional precautions are needed **Monitoring** — as per copper IUD **Removal** — Need to use additional contraception or abstain from intercourse for seven days prior to removal	DMPA can be given up to day five of the cycle without the need for additional precautions Provided pregnancy is excluded DMPA can be given after day five but additional contraception is required for seven days DMPA can be given up to day five post first or second trimester abortion after this time additional contraception is required for seven days DMPA can be given up to day 21-post partum without additional precautions, after this time additional contraception is required for seven days	Nexplanon® insertion and removal should only be carried out by those trained in this procedure It can be inserted up to day five of the cycle without the need for additional precautions Provided pregnancy is excluded it can be given after day five but additional contraception is required for seven days It can be given up to day five post first or second trimester abortion after this time additional contraception is required for seven days It can be given up to day 21 post partum without additional precautions, after this time additional contraception is required for seven days No monitoring is required but women are advised to re-present if they are unable to feel the implant or if they have any problematic side effects

	additional contraception for seven days prior to removal			
Potential side effects	**Menorrhagia and dysmenorrhoea** – up to 50% of patients discontinue use **Uterine perforation** – <1 in 1000 risk **Infection** – <1 in 100 low risk women will develop pelvic inflammatory disease after IUD insertion **Vasovagal reaction at time of insertion** – usually resolves spontaneously in healthy women but persistent bradycardia may require atropine **Expulsion** – <1 in 20 women over 5 years of use and usually occurs in the first 3 months **Ectopic pregnancy** – 1 in 1000 over 5 years IUD use but if pregnancy occurs with an IUD in situ the risk of that pregnancy being an ectopic pregnancy is 1 in 20	Up to 60% of women stop using the Mirena® IUS before five years due to problems with bleeding, pain or hormonal side effects **Uterine perforation** – <1 in 1000 **Expulsion** **Infection** – < 1 in 100 in low risk women **Vasovagal reaction at time of insertion** **Ectopic pregnancy** – 1 in 1000 over 5 years IUD use but if pregnancy occurs with an IUD in situ the risk of that pregnancy being an ectopic pregnancy is 1 in 20 **Functional ovarian cysts** – 1 in 10 to 1 –100, usually resolve spontaneously **Progestogenic side effects** – similar for both Mirena® and Jaydess®. Symptoms including breast pain, headache, mood disturbance and acne tend to settle spontaneously	Up to 50% of women discontinue DMPA within the first year due to problematic bleeding **Weight gain** – DMPA is associated with weight gain particularly in adolescents with a BMI over 30 **Loss of bone mineral density** – the loss is thought to be small and bone mineral density returns to normal after cessation of DMPA. In under 18s and in women over 50 DMPA should only be considered if alternatives are unsuitable	Problematic bleeding is the main reason for discontinuing use. Complications related to implant insertion and removal are rare
Effect on periods	Menorrhagia and dysmenorrhoea common	Irregular light bleeding is common in the first six months Oligomenorrhoea or amenorrhoea common after one year	Amenorrhoea is common more so with DMPA Irregular bleeding may occur	Bleeding patterns vary 1/3 describe infrequent bleeding 1/5 of women are amenorrhoeic have prolonged or frequent bleeding.
Other considerations	Effective immediately following insertion No delay in return to fertility following removal	Cannot be used as emergency contraception as unlike the copper IUD there is no evidence it is effective immediately Can be used as endometrial protection in conjunction with oestrogen for HRT for up to 5 years (licence is for 4 years only) Mirena reduces pain associated with primary dysmenorrhoea, endometriosis and adenomyosis Mirena is an effective treatment for heavy menstrual bleeding No delay in return of fertility following removal	DMPA is unaffected by liver enzyme inducting drugs There can be an up to one year delay in return of fertility after DMPA	There is no delay in return of fertility after implant removal. Nexplanon® has been shown to have a beneficial effect on dysmenorrhoea The efficacy of Nexplanon® has been shown to be affected by enzyme inducing drugs therefore additional contraception is required while taking and for 28 days after stopping enzyme inducing medication

Table 5

Emergency contraception

Case 3

A 19-year-old nulliparous woman attends requesting emergency contraception (EC). She had UPSI 48 hours ago and is anxious regarding her risk of pregnancy. She has no significant past medical or surgical history.

How would you assess this patient?

A risk assessment for non-consensual intercourse and abuse should be carried out and advice and support offered where this is suspected. An STI risk assessment should be performed and testing offered if appropriate, she should be informed that she may need retesting at a later date to detect recently acquired infection. Post exposure prophylaxis should be considered in high-risk cases presenting within 72 hours of exposure. Pregnancy needs to excluded before EC can be offered.

Pregnancy is possible when UPSI occurs on any day during a natural menstrual cycle, the risk is very low on days one to three and is highest on the day of ovulation and the six days prior to this. There are three types of EC available, the Cu-IUD, levonorgestrel emergency contraception (LNG-EC) taken as a single 1.5 mg tablet and Ulipristal acetate emergency contraception (UPA-EC) taken as a single 30 mg tablet. UKMEC 2016 includes no contraindications to oral EC, although use of UPA-EC is advised against in women taking glucocorticoids for severe asthma due to the anti-glucocorticoid effect of UPA (Table 6).

Women should be advised that the Cu-IUD is the most effective form of emergency contraception and is the only EC that is effective after ovulation. LNG-EC is licenced for use up to 72 hours and UPA-EC for up to 120 hours after UPSI or contraceptive failure. UPA-EC has been shown to be more effective than LNG-EC.

UPA-EC should be given first line if the Cu-IUD is unacceptable and UPSI has occurred at a high-risk time (days immediately prior to ovulation) (Table 7).

In cases where oral EC is given women should be informed that this does not protect against pregnancy if there is another instance of UPSI in the same cycle. For LNG-EC users, hormonal contraception can be started immediately after its administration but additional barrier contraception will be required until the contraceptive becomes effective. If hormonal contraception is started post oral EC, a pregnancy test should be performed 21 days later to exclude a pregnancy due to EC failure. UPA-EC users should wait 120 hours before starting hormonal contraception as progestogens may impede the ability of UPA to delay ovulation thus reducing its efficacy as an EC.

A pregnancy test is recommended if the next menstrual period is delayed for more than seven days, if it is lighter than usual or if there is pain unlike her usual dysmenorrhoea. Women who have started contraception following oral EC should perform a urinary pregnancy test 21 days after the episode of UPSI whether or not they have had any bleeding.

What are the ethical considerations associated with emergency contraception

A judicial review in 2002 concluded that pregnancy begins after implantation, therefore EC should not act to disrupt a pregnancy which has already implanted but rather should act to prevent fertilisation or implantation from occurring. Some women may have cultural or religious reasons for wishing to avoid using EC that acts post-fertilisation and this should be discussed and considered when offering treatment.

Indications for emergency contraception

No contraception use	
Withdrawal technique used	
Failed barrier method	
UPSI from 21 days post partum unless criteria met for lactational amenorrhoea	
UPSI from five days after miscarriage, abortion or ectopic pregnancy	
Women taking combined hormonal contraceptives, progesterone only pill, progesterone only implant	In cases where additional contraception needed when starting and UPSI occurs UPSI occurred while taking or within 28 days of taking potent liver enzyme inducing drugs (offer Cu-IUD or double dose LNG-EC) UPSI occurs when implant has exceeded tis duration of use
Women taking combined pill	Two or more active pills missed (more than 48 hours late) in week one and UPSI in week one or pill free interval
Women using combined contraceptive patch or ring	Patch detachment/ring removal for more than 48 hours in week one and UPSI in week one or hormone free interval Extension of hormone free interval of over 48 hours
Women using progesterone only pill	Pill over three hours late (12 hours for desogestrel only pill) and UPSI before contraceptive efficacy re-established (it takes 48 hours for contraceptive efficacy to be re-established after restarting pill)
Women using progestogen only injection	UPSI and delay of over 14 weeks since last injection of DMPA UPSI within first seven days of late injection
Women using intrauterine contraceptives	UPSI seven days prior to insertion, removal, partial or complete expulsion of Cu-IUD/IUS In cases where additional contraception needed when starting IUS or IUS has exceeded its duration of use and UPSI occurs

Table 6

Summary of characteristics of emergency contraceptives

	Cu-IUD	LNG-EC	UPA-EC
Mechanism of action	Inhibits fertilisation via the toxic effects of copper on the ovum and sperm. Inhibits implantation via an endometrial inflammatory reaction.	A progestogen which acts be inhibiting ovulation for five days after which sperm from UPSI are no longer viable	Selective progesterone receptor modulator which acts by delaying ovulation for five days after which sperm from UPSI are no longer viable
Indication	Within 120 hours of first UPSI in a cycle or within five days of earliest estimated date of ovulation	Within 72 hours of UPSI	Within 120 hours of UPSI
Reported pregnancy rate after administration	<0.1%	0.6–2.6%	1–2%
Advantages	• Can be used after ovulation • Provides ongoing contraception • Efficacy unaffected by weight or enzyme inducers • Most effective form of emergency contraception	• No evidence of harm if inadvertently given in very early pregnancy therefore can be given if woman has had UPSI earlier in same cycle • Can be used more than once in the same cycle • Can be used in breastfeeding women • Hormonal contraception can be started immediately after using	• No evidence of harm if inadvertently given in very early pregnancy therefore can be given if woman has had UPSI earlier in same cycle • Can be used more than once in the same cycle • More effective than LNG-EN
Disadvantages	• Insertion can be associated with pain, bleeding, infection, vasovagal reaction, perforation or expulsion • Increased risk of perforation in post partum (up to 28 days) and breast-feeding women although absolute risk still low	• Not effective if ovulation has already occurred • Nausea, headache, dysmenorrhoea reported in 10% of users • Requires repeat dose if vomiting occurs within three hours of taking • May delay menses, pregnancy test required if > seven days late • Need to double dose to 3 mg if BMI >26, if weight >70 kg or if taking an enzyme inducer	• Not effective if ovulation has already occurred • Nausea, headache, dysmenorrhoea reported in 10% of users • Requires repeat dose if vomiting occurs within three hours of taking • May delay menses, pregnancy test required if > seven days late • Less effective if taking enzyme inducers • Less effective if BMI >30 or weight >85 kg • Less effective if patient has recently taken a progestogen (e.g. EC needed due to missed pill) • Initiation of hormonal contraception should be delayed for five days after taking UPA-EC (see above) • Not recommended in women with severe asthma controlled by glucocorticoids • Excreted in breast milk and safety unknown, therefore breastfeeding should be avoided for seven days after taking

Table 7

Options for couples who do not wish to use artificial contraceptives

There are two types of natural family planning methods, namely fertility awareness methods and lactational amenorrhoea. Fertility awareness involves identifying the most and least fertile times in a cycle by assessing cervical secretions, palpable changes in the cervix, basal body temperature, length of the menstrual cycle or by using computerized fertility monitoring devices which assess urinary hormone levels. Combined fertility indicators are more effective than using a single technique and it can take two or three cycles to learn to identify the fertility indicators. They are not recommended in women with medical conditions in where pregnancy would pose a significant risk to their heath or in women taking teratogenic drugs. It is unsuitable for women with irregular cycles, who are postpartum or breastfeeding, have medical conditions that affect their menstrual cycle or who take medications that can alter cervical secretions.

Lactational amenorrhoea is up to 98% effective in women who are less than six months postpartum, exclusively breastfeeding and amenorrhoeic.

Conclusion

For women to make informed choices regarding their sexual and reproductive choices, clinicians need to be well versed in the various contraceptive options available, their efficacy and the advantages and disadvantages of each option. Placing the woman's individual needs at the centre of decision making will improve acceptability and compliance by enabling her to choose a contraceptive that is in keeping with any cultural or religious beliefs while meeting her lifestyle and medical needs. ◆

FURTHER READING

Faculty of Sexual and Reproductive Healthcare. The UK medical eligibility criteria for contraceptive use UKMEC. Faculty of Sexual and Reproductive Healthcare, 2016.

Faculty of Sexual and Reproductive Healthcare Clinical Effectiveness Unit. Clinical guidance. Emergency contraception. Faculty of Sexual and Reproductive Healthcare, December 2017.

Faculty of Sexual and Reproductive Healthcare Clinical Guidance. Contraceptive choices for young people. Faculty of Sexual and Reproductive Healthcare, March 2010.

Faculty of Sexual and Reproductive Healthcare Clinical Guidance. Male and female sterilisation. Faculty of Sexual and Reproductive Healthcare, September 2014.

National Institute for Health and Clinical Excellence. Long-acting reversible contraception Clinical guideline 30. London: NICE, 2014.

Practice points

- The choice of contraception should take into account the woman's personal preference, cultural or religious beliefs and whether any non-contraceptive benefits are desirable
- Adolescents attending for contraceptive advice should be risk assessed for sexual abuse or exploitation and advice sought from safeguarding leads where concerns are raised
- Age or nulliparity are not contraindications to intrauterine contraceptives.
- It is lawful to provide contraceptive advice and/or treatment to under 16s without parental consent provided they meet the criteria for Fraser competence
- Women requesting sterilisation should be counselled regarding LARCs which are more effective than sterilization
- Oral emergency contraceptives are not effective if ovulation has already occurred and they should be offered the Cu-IUD as an alternative