Contraception and its ethical considerations

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Abstract

A variety of contraceptive methods have been developed, both medical and surgical, which match the changing requirement of women as they progress through their reproductive years. It is well recognised that women are using contraceptives for longer than their predecessors; delaying their first child until later in life. The ideal contraceptive method should incorporate a woman's individual preferences, regarding: compliance and side effects and comply with personal, religious and economic circumstances. If individuals are presented with a variety of contraceptive methods, evidence suggests that it improves long term compliance. From the introduction of the contraceptive pill in 1950 by Pincus and Chang, there have been many ethical considerations raised regarding contraception use. This review looks at common contraceptive options and the present day ethical dilemmas faced when prescribing and counselling patients.

Keywords contraception; ethics; Mirena coil; oral contraceptive pill; sterilisation

Introduction

There are 15 methods of contraception available in the NHS. In developing countries, female sterilisation and intrauterine devices are most popular. In the UK the uptake of long acting reversible contraception is low, at approximately 5% in women aged 16–49 years in 2004–10, as found by Soriano et al. By comparison, 25% of the female population opt for the oral contraceptive pill and 23% for male condoms. Healthcare professionals providing contraception, should have a broad knowledge of the options available, cautions and contraindications for use. There is good evidence that presenting a variety of contraceptive methods, improves long term compliance and satisfaction.

The World Health Organization (WHO) defines four types of patients requiring contraception counselling:

- Returning patients with no problems
- Returning patients with problems
- New patients with a method in mind
- New patients with no method in mind.

Clinical assessment

A comprehensive contraceptive history includes: menstrual history (last menstrual period, menorrhagia, abnormal vaginal bleeding, desire for regular cycles), parity (for recent pregnancies enquire if lactating), future family planning, previous gynaecology history (previous contraception use), medical history (epilepsy, migraine with aura, previous venous thromboembolism, thrombophilia, ischaemic heart disease, liver disease, breast cancer), social factors (ability to attend appointments, remember daily tablets) and drug history (liver enzyme inducers, complementary medicines). In addition exclude pregnancy, assess for emergency contraception and counsel or screen for sexually transmitted infections (STI).

Examination should include a baseline body mass index (BMI) and blood pressure (BP) recording, with BP monitored annually thereafter for hormonal contraceptives. Abdominal palpation can detect an enlarged fibroid uterus, or elicit tenderness suggesting pelvic infection. For intrauterine and diaphragm devices, a pelvic examination is necessary. A bimanual examination to identify uterine size, axis and mobility and to assess for adnexal masses. Routine STI screening is not recommended, unless high risk (e.g. under the age of 25), or symptomatic.

When counselling patients about contraceptive options the areas to cover include:

- Contraception efficacy
- Method and duration of use
- Potential side effects
- Non-contraceptive benefits
- Instructions on how to initiate and discontinue
- Indications for emergency contraception.

This review looks at three case studies, discussing approaches to counselling and their ethical challenges.

Case 1: The adolescent attender

Amber is a 15-year-old attending the family planning clinic to request the oral contraceptive pill. She is in her first relationship with a 15 year old boy in her class. She is nervous because her parents are not aware of her visit.

What would you ask her?

Women under the age of 25 are an important group, comprising the highest first year contraception failure rates and almost half unplanned pregnancies. In the UK teenage pregnancies remain amongst the highest in developed countries. Alongside the routine contraceptive history, her capacity to consent should be assessed and her ability to comply with medications. Before initiating contraception, pregnancy should be excluded and her STI risk assessed.

What options are available to her?

The combined oral contraceptive pill (COCP) is a common choice for adolescents (Tables 1 and 2). It is simple to use, cost-effective and reliable providing up to 99% efficacy for perfect use, however typical failure rates are 9%. Its use reduces with age, peaking at 20–24 years with approximately 75% use, compared to 11% of women in their late forties. The main mechanism of action is inhibition of follicle-stimulating and luteinising hormones, preventing follicular development and ovulation. Secondary actions include endometrial thinning and thickened cervical mucus, inhibiting sperm migration and fertilisation.

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WHO eligibility criteria for combined hormonal contraceptive use

Category WHO 2 or 3: Relative contraindications	Category WHO 4: Absolute contraindications
Smoker aged over 35 years	Pregnancy
Breastfeeding <6/52	Undiagnosed genital bleeding
Postpartum <21 days	Breast cancer
Postpartum 21–42 days + VTE risk factors	Migraine + aura
Diabetes + retinopathy/nephropathy/vascular disease	VTE history
Hyperprolactinaemia	Thrombophilia
Hypertension: (BP 140–159 or diastolic 90–99 mmHg)	Major surgery + prolonged immobilisation
Symptomatic gallbladder disease	Multiple arterial cardiovascular disease risk factors or diseases
Migraine with focal/no aura in women aged >35 years	Hypertension: systolic >160 mmHg, diastolic >100 mmHg
BMI ≥35	Pill induced hypertension
	Active liver disease
	Liver cancer
	Cholestatic jaundice
	Severe cirrhosis
	Acute porphyria
	Systemic lupus erythematosus + positive APL antibodies
	Thrombotic thrombocytopaenic purpura
	Haemolytic uraemic syndrome

Table 1

Other options available for adolescents may include:

IUD, IUS, implants and depot Provera may also be considered for longer term contraception, but barrier methods should be considered simultaneously to prevent sexually transmitted infections. DMPA may be considered with caution, due to the resulting impairment on bone mineralisation if other methods are unacceptable.

What should you include in COCP counselling?

There are three main types of COCP:

Common drugs that interact with hormonal contraception

Drug name	Drug interaction
Barbiturates	Enzyme inducer (increases metabolism of hormones reducing their dose and efficacy)
Carbamazepine	Enzyme inducer
Phenytoin	Enzyme inducer
Rifampicin	Enzyme inducer
Griseofulvin	Reduced contraceptive efficacy
Lamotrigine monotherapy	Risk of reduced seizure control Potential for toxicity in the COCP-free week Doesn't affect contraceptive efficacy
Cyclosporine	Increased cyclosporine levels and side effects
Ritonavir-boosted protease inhibitors	Reduces oestrogen levels in COCP

Table 2

The first two are taken once a day for 21 days, followed by a pill free week:

- Monophasic – single hormone (Microgynon, Cilest).
- Phasic – two or three hormone doses, taken in order (Binovum, Logynon).

The third type is the everyday pill, containing placebo tablets for the pill free week (Microgynon ED, Logynon ED).

Delivery of sex steroids by non-oral routes such as transdermal or injectable routes, bypasses first pass metabolism in the liver; allowing lower doses and stable dose delivery, without peaks and troughs.

In all cases, if started during day 1–5 of a regular 28-day menstrual cycle, the contraceptive value is immediate. Starting beyond day 5 requires seven days of additional contraceptive cover (e.g. condoms). A follow-up GP review should occur at 3 months to review treatment and any problems. Typical discontinuation rates at 12 months are: 30% for COCP, 43% for the contraceptive injection and 50% for the contraceptive patch.

Common side effects include: mood swings, mastalgia, fluid retention, and headache. Weight gain is a commonly cited reason for discontinuation; however a causal relationship has not been established.

All individual types of COCP increase venous thrombosis risk more than two-fold; third generation progesterones (desogestrel, gestodene) and a BMI over 30 further increases this risk. Other risks include: stroke, hypertension, myocardial infarction, gallbladder disease, cervical, hepatocellular and breast cancer. Over the last twenty years, concerns with oestrogen side effects have encouraged the use of lower oestrogen doses, which suppress