



Faculty of Sexual & Reproductive Healthcare Clinical Guidance



Postnatal Sexual and Reproductive Health

Clinical Effectiveness Unit


September 2009

ISSN 1755-103X

ABBREVIATIONS USED

β-hCG	beta-human chorionic gonadotrophin
BMI	body mass index
CEU	Clinical Effectiveness Unit
CHC	combined hormonal contraception
COC	combined oral contraception
CI	confidence interval
Cu-IUD	copper-bearing intrauterine device
DMPA	depot medroxyprogesterone acetate
EC	emergency contraception
FSRH	Faculty of Sexual and Reproductive Healthcare
HIV	human immunodeficiency virus
LAM	lactational amenorrhoea method
LNG-IUS	levonorgestrel-releasing intrauterine system
LARC	long-acting reversible contraception
N-9	nonoxinol-9
NET-EN	norethisterone enantate
POEC	progestogen-only emergency contraception
POP	progestogen-only pill
RCOG	Royal College of Obstetricians and Gynaecologists
STI	sexually transmitted infection
SPC	Summary of Product Characteristics
UKMEC	<i>UK Medical Eligibility Criteria for Contraceptive Use</i>
UPSI	unprotected sexual intercourse
VTE	venous thromboembolism
WHOMEK	<i>World Health Organization Medical Eligibility Criteria for Contraceptive Use</i>

GRADING OF RECOMMENDATIONS

- A** Evidence based on randomised controlled trials
- B** Evidence based on other robust experimental or observational studies
- C** Evidence is limited but the advice relies on expert opinion and has the endorsement of respected authorities
-  Good Practice Point where no evidence exists but where best practice is based on the clinical experience of the multidisciplinary group

Published by the Faculty of Sexual and Reproductive Healthcare
Registered in England No. 2804213 and Registered Charity No. 1019969

First published in September 2009 (Faculty website version updated in February 2010)

Copyright © Faculty of Sexual and Reproductive Healthcare 2009

Permission granted to reproduce for personal and educational use only. Commercial copying, hiring and lending are prohibited.

CONTENTS

Abbreviations Used	IFC
Grading of Recommendations	IFC
Summary of Key Recommendations	iii
1 Purpose and Scope	1
2 Background	1
3 Postnatal Well-being	1
3.1 <i>Sexual function</i>	1
3.2 <i>Domestic violence</i>	2
4 Postnatal Fertility	2
5 Postnatal Contraception	3
5.1 <i>Provision of contraceptive advice</i>	3
5.2 <i>Assessment of contraceptive needs</i>	3
5.3 <i>Contraceptive choice</i>	4
5.4 <i>Considerations for breastfeeding women</i>	4
5.5 <i>Medical eligibility</i>	6
5.6 <i>How to advise women on starting specific methods postpartum</i>	7
References	11
Appendix 1: Development of CEU Guidance	14
Appendix 2: Contraceptive Methods Available in the UK	15
Discussion Points and Questions	16
Steps Involved in the Development of CEU Guidance	IBC
Comments and Feedback on Published Guidance	IBC

SUMMARY OF KEY RECOMMENDATIONS

Postnatal Well-being

- ✓ Health professionals should create opportunities for women and/or their partners to raise issues relating to postnatal sexual problems, body image and mental well-being, and should know where to refer if appropriate.
- ✓ Health professionals should allow opportunities for time alone with women in the antenatal and postnatal period, and should know how and where to access information and support for individuals affected by domestic violence.

Assessment of Contraceptive Needs

- ✓ Health professionals should find opportunities during both the antenatal and postnatal period to discuss all methods of contraception.
- ✓ Health professionals should assess a woman's postpartum contraceptive needs by taking account of her personal beliefs/preferences, cultural practices, sexual activity, breastfeeding pattern, menstruation, medical and social factors.

Postnatal Contraception

- ✓ The benefits of long-acting reversible contraception (LARC) methods in terms of efficacy should be highlighted to all postpartum women.

Considerations for Breastfeeding Women

- B** Women can be informed that available evidence suggests that use of progestogen-only contraception while breastfeeding does not affect breast milk volume.
- C** Women can be informed that there is currently insufficient evidence to prove whether or not combined hormonal contraception (CHC) affects breast milk volume.
- A** Women can be informed that progestogen-only contraception has been shown to have no effect on infant growth.
- B** Women may be advised that if they are <6 months postpartum, amenorrhoeic and fully breastfeeding, the lactational amenorrhoea method (LAM) is over 98% effective in preventing pregnancy.
- C** Women using LAM should be advised that the risk of pregnancy is increased if the frequency of breastfeeding decreases (stopping night feeds, supplementary feeding, use of pacifiers), when menstruation returns or when >6 months postpartum.

How to Advise Women on Starting Specific Methods Postpartum

- C** Women can be advised that contraception is not required before Day 21 postpartum. If starting a hormonal method on or before Day 21 there is no need for additional contraception.
- C** If starting a hormonal method after Day 21, clinicians should be reasonably sure that the woman is not pregnant or at risk of pregnancy (Box 3), and should advise that she avoids sex or uses additional contraception for the first 7 days of use [2 days for the progestogen-only pill (POP)], unless fully meeting LAM criteria.
- C** CHC should not be commenced before Day 21 due to the increased risk of thrombosis. Non-breastfeeding women may start CHC from Day 21 postpartum.
- C** Breastfeeding women should avoid CHC in the first 6 weeks postpartum as there is insufficient evidence to prove the safety of CHC use while establishing breastfeeding.
- ✓ Use of CHC between 6 weeks and 6 months should not be recommended in fully breastfeeding women unless other methods are not acceptable or available. In partially or token breastfeeding women the benefits of CHC use may outweigh the risks.

SUMMARY OF KEY RECOMMENDATIONS

How to Advise Women on Starting Specific Methods Postpartum (continued)

- ✓ Postpartum women (breastfeeding and non-breastfeeding) can start the POP at any time postpartum.
- C Non-breastfeeding women can start a progestogen-only injectable method at any time postpartum.
- C Breastfeeding women should not start a progestogen-only injectable method before Day 21 unless the risk of subsequent pregnancy is high.
- C Women should be advised that troublesome bleeding can occur with use of depot medroxyprogesterone acetate (DMPA) in the early puerperium.
- ✓ If more convenient, breastfeeding and non-breastfeeding women can choose to have a progestogen-only implant inserted before Day 21, although this is outside the product licence for Implanon®.
- C Unless a copper-bearing intrauterine device (Cu-IUD) can be inserted within the first 48 hours postpartum (breastfeeding and non-breastfeeding women), insertion should be delayed until Day 28 onwards. No additional contraception is required.
- C A levonorgestrel-releasing intrauterine system (LNG-IUS) can be inserted from Day 28 postpartum (breastfeeding and non-breastfeeding women). Women should avoid sex or use additional contraception for 7 days after insertion unless fully meeting LAM criteria.
- C Women who choose a diaphragm or cervical cap should be advised to wait at least 6 weeks postpartum before attending for assessment of size requirement.
- ✓ Women and men considering sterilisation should be informed of the permanence of the procedure; about the risks, benefits and failure rates associated with sterilisation; and about other methods of contraception including LARC.
- ✓ Women can be advised that unprotected sexual intercourse or contraceptive failure before Day 21 postpartum is not an indication for emergency contraception.
- ✓ Women can be advised that progestogen-only emergency contraception can be used from Day 21 onwards and the emergency Cu-IUD from Day 28 onwards.



Faculty of Sexual and Reproductive Healthcare Clinical Effectiveness Unit

A unit funded by the FSRH and supported by NHS Greater Glasgow & Clyde to provide guidance on evidence-based practice

FSRH Guidance (September 2009) Postnatal Sexual and Reproductive Health

(Update due by September 2014)

1 Purpose and Scope

This document provides guidance for health professionals on sexual and reproductive health in the postnatal period (i.e. delivery from 24 weeks gestation onwards). Recommendations are based on available evidence and consensus opinion of experts. They should be used to guide clinical practice but they are not intended to serve alone as a standard of medical care or to replace clinical judgement in the management of individual cases. A key to the Grading of Recommendations, based on levels of evidence, is provided on the inside front cover of this document. Details of the methods used by the Clinical Effectiveness Unit (CEU) in developing this guidance are outlined in Appendix 1.

2 Background

The postnatal period is associated with physiological, psychological and social changes, which can influence sexual and reproductive health. Although women may wish to delay or avoid further pregnancy, they may not know how to access contraception or which methods are safe to use, particularly if they are breastfeeding. There may also be difficulties with sexual function and relationships during this time, for which individuals may require information and/or support.

3 Postnatal Well-being

3.1 Sexual function

There is wide variation in the time from delivery to resumption of sexual activity. While some individuals resume intercourse in the early postpartum period (i.e. in the first 6 weeks),^{1,2} a small proportion have still not resumed intercourse by 6 months.² A systematic review has suggested that there may be an association between sexual dysfunction and assisted vaginal delivery,³ whilst other studies have indicated that mode of delivery has little impact on resumption of sexual activity or sexual function.^{1,4,5} There is little evidence in relation to the sexual well-being of partners during the postpartum period.

Sexual problems such as perineal pain, dyspareunia, reduced libido, vaginal tightness, laxity or dryness, and feelings of sexual unattractiveness, are not uncommon following childbirth,^{2,6} but women and their partners may be wary of raising these issues. Information should be provided in the antenatal or early postnatal period (see suggestions in Box 1) and individuals should be encouraged to discuss any sexual or relationship problems with their midwife, general practitioner, health visitor or sexual and reproductive health specialist.

Box 1 Sexual activity after childbirth

Women and their partners may be reassured by the following information:

- The time to resumption of sexual activity will vary between couples.
- There is no set time frame in which sexual activity should have resumed.
- Both partners need to be physically and emotionally ready.
- Some people may experience difficulties with sexual activity following the birth of their child.
- Sexual desire or sex drive may be low in the first few months.
- Any difficulties or concerns should be discussed with a health professional.

Box 2 National Institute for Health and Clinical Excellence (NICE) Recommendations⁷ (reproduced with permission)

Perineal Pain

- Women should be asked whether they have any concerns about the healing process of any perineal wound including experience of perineal pain, discomfort or stinging, offensive odour or dyspareunia.
- The health care professional should offer to assess the perineum if the woman has pain or discomfort.
- Signs and symptoms of infection, inadequate repair, wound breakdown or non-healing should be evaluated (urgent action).
- Women should be advised of the importance of perineal hygiene, including frequent changing of sanitary pads, washing hands before and after doing this, and daily bathing or showering to keep their perineum clean.

Dyspareunia

- 2–6 weeks after the birth women should be asked about resumption of sexual intercourse and any dyspareunia.
- If a woman expresses anxiety about resuming intercourse, the reasons for this should be explored.
- Women with perineal trauma who experience dyspareunia should be offered an assessment of the perineum.
- A water-based lubricant gel to help ease discomfort during intercourse may be advised, particularly if a woman is breastfeeding.
- Women who continue to express anxiety about sexual health problems should be evaluated (non-urgent action).

Guidance on the routine postnatal care of women and their babies in the first 6–8 weeks after birth has been produced by the National Institute for Health and Clinical Excellence (NICE).⁷ The recommendations on perineal pain and dyspareunia are given in Box 2.

Cochrane reviews have found no evidence to support the use of topically applied local anaesthetics⁸ and only limited evidence of benefit from cooling agents for perineal pain after childbirth.⁹



Health professionals should create opportunities for women and/or their partners to raise issues relating to postnatal sexual problems, body image and mental well-being, and should know where to refer if appropriate.

3.2 Domestic violence

The UK Government defines domestic violence as: “Any incident of threatening behaviour, violence or abuse (psychological, physical, sexual, financial or emotional) between adults who are or have been intimate partners or family members, regardless of gender or sexuality”.¹⁰

Domestic violence can affect individuals of any age, gender, ethnicity, sexual orientation or religion, although the majority of abuse occurs against women. Pregnancy and/or the birth of a child can be associated with an increase or onset of domestic violence.^{11,12} Consequently, health professionals working with postnatal women should be aware of the signs of domestic violence such as: repeated or chronic injuries, stress and anxiety, frequent admissions and/or appointments for minor complaints.^{11,12} Creating opportunities for private time (i.e. seeing an individual on their own) and taking measures to reduce communication barriers (e.g. providing appropriate interpreters) may facilitate disclosure of abuse. Health professionals should be familiar with any national or local guidelines in relation to domestic violence and know where to access appropriate information and support for individuals.^{11,12}



Health professionals should allow opportunities for time alone with women in the antenatal and postnatal period, and should know how and where to access information and support for individuals affected by domestic violence.

4 Postnatal Fertility

During pregnancy, high levels of sex steroid hormones suppress pituitary gonadotrophins. Within 30 days of delivery, placental sex steroid levels decrease and gonadotrophins increase¹³ thus stimulating the activity of the ovaries. The earliest date of ovulation in non-breastfeeding women is thought to be Day 28¹⁴ and menstruation may return by Week 6.

In breastfeeding women, suckling disrupts the frequency and amplitude of gonadotrophin pulses and, despite ovarian follicular activity, ovulation is suppressed.^{15,16} Ovulation returns when the frequency and duration of suckling episodes decrease.^{17–19} Menstruation occurs on average 28.4 (range, 15–48) weeks after delivery for women who are breastfeeding.²⁰ Initial cycles are often associated with an inadequate luteal phase and relative infertility. The mean time to initiation of ovulation is 33.6 (range, 14–51) weeks.¹⁹

The first 'true period' is defined as any bleeding lasting at least 2 days, requiring the use of sanitary protection for at least 1 day, followed by a second bleeding episode within the next 21–70 days.²¹ Although return of menstruation is often the first sign of fertility, awaiting the first menstrual period before starting contraception may put some women at risk of pregnancy.

5 Postnatal Contraception

5.1 Provision of contraceptive advice

Postpartum contraceptive advice allows women to plan the spacing and number of future children. Inter-pregnancy intervals of less than 6 months have been associated with an increased risk of negative perinatal outcome.²² Short inter-pregnancy intervals also increase the risks to maternal health;²³ therefore aside from the socioeconomic benefits, delaying future pregnancies may be beneficial in terms of health.

The effectiveness of postpartum education has not yet been established.²⁴ NICE guidance suggests that contraception should be discussed within the first week of delivery.⁷ It also has been suggested that postpartum contraception advice may be better delivered antenatally.²⁵ Prior to birth, women and partners may have greater time to think through their options than immediately after birth when it may not seem like a priority.



Health professionals should find opportunities during both the antenatal and postnatal period to discuss all methods of contraception.

5.2 Assessment of contraceptive needs

Prior to Day 21 postpartum no contraceptive methods are required. In non-breastfeeding women, ovulation may occur as early as Day 28. As sperm can survive for up to 7 days in the female genital tract, contraceptive protection is required from Day 21 onwards if pregnancy is to be avoided.

Women who are breastfeeding and who wish to avoid pregnancy should be advised to use a contraceptive method. As fertility is reduced, any contraceptive method will be more effective when used by a breastfeeding woman. Those women who are fully breastfeeding may wish to rely on the lactational amenorrhoea method (LAM) alone until breastfeeding reduces or other LAM criteria are no longer fulfilled (Figure 1).

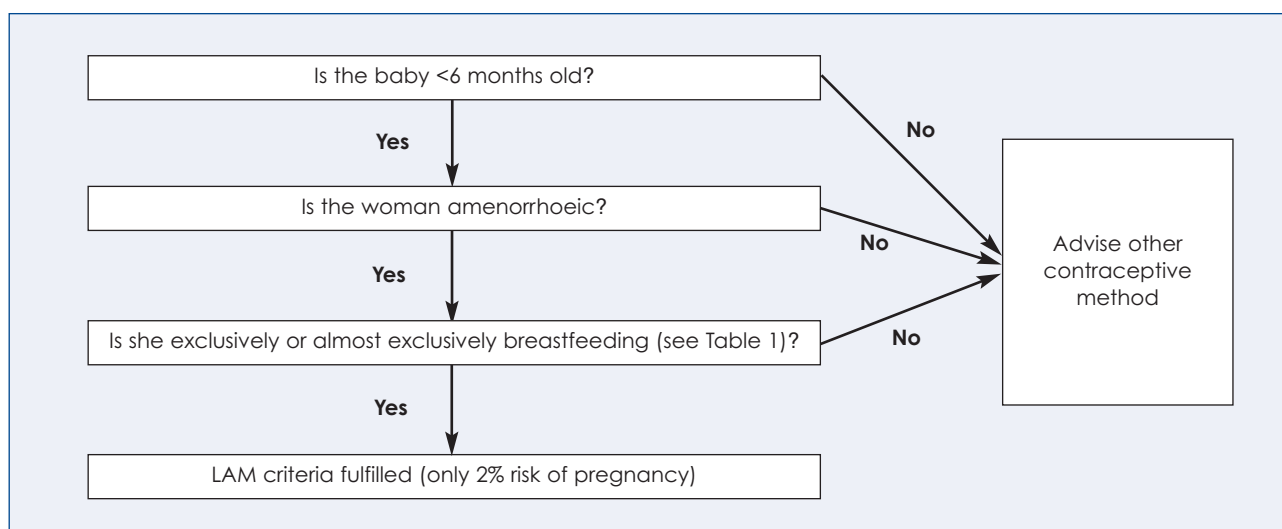


Figure 1 Algorithm relating to use of the lactational amenorrhoea method (LAM)

Health professionals should be sensitive to the fact that some women may not wish or need to use contraception following delivery for cultural, religious, relationship or other reasons. Additionally those women who have required fertility treatment in the past are not necessarily infertile and may now require contraception. Consideration should also be given to an individual's risk of acquiring or transmitting sexually transmitted infections (STIs). Condoms can be offered as a means of reducing STI and preventing pregnancy either alone or as backup to other contraceptive methods.

Prior to prescribing any form of contraception health professionals should assess:

- Contraceptive needs (e.g. degree of efficacy required)
- Sexual activity and function
- A woman's own beliefs, attitudes and personal preferences
- Cultural practices that may impact on choice of method
- Whether a woman is breastfeeding
- Whether ovulation is likely to have resumed
- Whether there is any possibility of pregnancy
- Social factors (e.g. return to work, ability to access services for initiation or follow-up)
- Medical history [e.g. hypertension, migraine, venous thromboembolism (VTE), obesity, HIV, cholestasis, trophoblastic disease]
- Risk of acquiring or transmitting STIs.

✓ **Health professionals should assess a woman's postpartum contraceptive needs by taking account of her personal beliefs/preferences, cultural practices, sexual activity, breastfeeding pattern, menstruation, medical and social factors.**

5.3 Contraceptive choice

A wide variety of contraceptive methods are available in the UK (Appendix 2). Women should be informed about all methods that are available and appropriate for them to use. Long-acting reversible contraception (LARC) refers to those methods that require administration less than once per cycle or month²⁶ such as the progestogen-only injectable, implant and intrauterine methods. LARC methods offer the advantage of being less user-dependent and these provide the best protection against pregnancy with 'typical use'.²⁷ They may also be more cost-effective.²⁶

✓ **The benefits of LARC methods in terms of efficacy should be highlighted to all postpartum women.**

5.4 Considerations for breastfeeding women

Although contraceptive hormones are excreted into breast milk in very small amounts (<1% of the maternal dose), there have been concerns about their potential impact on breastfeeding and on infant growth and development. For this reason, more restrictions apply to the use of hormonal contraception in breastfeeding women than in women who are not breastfeeding. However, no adverse effects on breastfeeding, infant growth or development have been noted in studies that looked at the progestogen-only pill (POP),^{28–35} depot medroxyprogesterone acetate (DMPA),^{29–31,36–39} the etonogestrel implant (Implanon®),^{40–41} levonorgestrel-releasing intrauterine system (LNG-IUS)^{42,43} or the copper-bearing intrauterine device (Cu-IUD).^{44,45}

From current evidence, hormonal methods, including combined oral contraception (COC), do not appear to adversely affect infant development outcomes.^{29,30} There are some theoretical concerns about exposure of the neonate to contraceptive hormones before 6 weeks postpartum and the effect that this may have on infant brain development. There is currently a lack of data to support or refute this concern.

There is conflicting evidence relating to combined hormonal methods and breastfeeding outcomes.^{31,37,46–49} Whilst there is a trend toward a negative effect on breastfeeding outcomes with early COC use, the evidence is difficult to interpret due to differences in measured outcomes, contraceptive preparations, populations studied, and time since delivery. A Cochrane systematic review concluded that there is currently insufficient evidence to adequately inform guidance regarding the impact of combined hormonal contraception (CHC) on breast milk quantity and quality.²⁹

It has been suggested that breastfeeding women who use oral progestogen-only emergency contraception (POEC) can reduce any potential infant exposure if they take the tablet immediately after feeding and delay the next breastfeed.^{50–52} One study suggests delaying breastfeeding and discarding expressed milk for between 8 and 24 hours after taking POEC.⁵² The CEU, however, found no evidence assessing the feasibility and outcomes of this in practice.

- B** Women can be informed that available evidence suggests that use of progestogen-only contraception while breastfeeding does not affect breast milk volume.
- C** Women can be informed that there is currently insufficient evidence to prove whether or not CHC affects breast milk volume.
- A** Women can be informed that progestogen-only contraception has been shown to have no effect on infant growth.

5.4.1 Lactational amenorrhoea method

The use of breastfeeding to provide protection against unintended pregnancy is known as the lactational amenorrhoea method (LAM). LAM can be started straight away; however, women must be fully or nearly fully breastfeeding day and night (Table 1), amenorrhoeic and <6 months postpartum in order to use LAM (Figure 1). LAM is over 98% effective when all criteria are met.⁵³ Women who choose to use LAM should be told that contraceptive efficacy will be reduced when the frequency of breastfeeding decreases, when menstruation returns or when they are >6 months postpartum. The introduction of supplementary feeding^{54,55} can affect the restoration of menstrual cycles and ovulation, as may the use of pacifiers.⁵⁴

Women may be reluctant to use LAM due to concerns about its effectiveness.^{56,57} Postpartum counselling about the benefits of LAM may help to increase acceptability of the method.⁵⁷

It is recommended that in breastfeeding women the use of fertility awareness-based methods should be delayed if the woman is <6 weeks postpartum.⁵⁸ From 6 weeks onwards caution is advised even if menses have begun.⁵⁸ Women who choose to move from LAM to fertility awareness methods will require the support of an experienced practitioner.⁵⁹ For those women wishing to move from LAM to a hormonal method, no additional contraception will be required in the first week of starting a progestogen-only method as long as the conditions for LAM are still being met during this first week.

Although breastfeeding should be promoted and supported in all populations, there will be circumstances in which it is not advised or possible due to medication⁶⁰ or because of conditions affecting the newborn. HIV-positive mothers should avoid breastfeeding if replacement feeding is feasible.⁵⁸

- B** Women may be advised that if they are <6 months postpartum, amenorrhoeic and fully breastfeeding, LAM is over 98% effective in preventing pregnancy.
- C** Women using LAM should be advised that the risk of pregnancy is increased if the frequency of breastfeeding decreases (stopping night feeds, supplementary feeding, use of pacifiers), when menstruation returns or when >6 months postpartum.

Table 1 Definitions of full and partial breastfeeding (adapted from Knight and Pyper)⁵³

Definition of breastfeeding	Contraceptive efficacy
Full breastfeeding <ul style="list-style-type: none"> ● Exclusive: no other liquids or solids given ● Almost exclusive: vitamins, water or juice given infrequently in addition to breastfeeds 	Over 98% effective if also: <ul style="list-style-type: none"> ● Amenorrhoeic (no vaginal bleeding after the first 56 days postpartum) ● <6 months postpartum ● No long intervals between feeds day or night (e.g. >4 hours during day and >6 hours at night)
Partial or token breastfeeding <ul style="list-style-type: none"> ● High: vast majority of feeds are breastfeeds ● Medium: about half of feeds are breastfeeds ● Low: vast majority of feeds are not breastfeeds ● Minimal: occasional irregular breastfeeds 	Little impact on fertility

5.5 Medical eligibility

Most contraceptive users are medically fit and can use any available method; however, there are some medical conditions or lifestyle factors that are associated with either theoretical or proven health risks. The *UK Medical Eligibility Criteria for Contraceptive Use*⁵⁸ is a set of criteria that classifies conditions or factors into one of four categories based on systematic reviews and expert opinion. The categories are listed in Table 2.

Table 3 outlines the UKMEC categories for pregnancy-related conditions. Table 4 outlines the current *UK Medical Eligibility Criteria for Contraceptive Use* (UKMEC) that are applicable to breastfeeding and non-breastfeeding women. These tables are independent and neither table takes into account any other individual conditions or lifestyle risk factors. Health professionals should therefore refer to UKMEC recommendations in conjunction with clinical judgement to assess contraceptive suitability for individuals with multiple risk factors.

With regard to contraceptive choices for obese women, only combined hormonal contraception and sterilisation are associated with potential risks. CHC use with a body mass index (BMI) of ≥ 30 – 34 kg/m^2 is a UKMEC Category 2 and $\geq 35 \text{ kg/m}^2$ BMI a UKMEC Category 3. There are no restrictions on using any other methods based on obesity alone (UKMEC Category 1).⁵⁸

Table 2 Definition of *UK Eligibility Criteria for Contraceptive Use* (UKMEC) categories for use of hormonal contraception, intrauterine devices and barrier methods⁵⁸

UKMEC Category	Definition
1	A condition for which there is no restriction on the use of the contraceptive method.
2	A condition where the advantages of using the method generally outweigh the theoretical or proven risks.
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.
4	A condition that represents an unacceptable health risk if the contraceptive method is used.

Table 3 Summary of *UK Eligibility Criteria for Contraceptive Use* (UKMEC) categories applicable to a history of pregnancy-related conditions⁵⁸

Contraceptive method	Hypertension ^a	Cholestasis ^b	Gestational diabetes	Gestational trophoblastic neoplasia ^c	
				Decreasing or undetectable β -hCG levels	Persistently elevated β -hCG levels or malignant disease
Combined hormonal contraception (i.e. COC, transdermal patch, vaginal ring)	2	2	1	1	1
Progestogen-only pill	1	1	1	1	1
Progestogen-only implant	1	1	1	1	1
Progestogen-only injectables	1	1	1	1	1
Cu-IUD and LNG-IUS (including post-Caesarean section)	1	1	1	1	4
Progestogen-only emergency contraception	1	1	1	1	1
Emergency Cu-IUD	1	1	1	1	4
Barrier methods	1	1	1	1	1

^aWhere current blood pressure normal.

^bWhere current liver function normal.

^cIncludes hydatidiform mole, invasive mole and placental tumour.

β -hCG, beta-human chorionic gonadotrophin; COC, combined oral contraception; Cu-IUD, copper-bearing intrauterine device; LNG-IUS, levonorgestrel-releasing intrauterine system.

Table 4 Summary of UK Eligibility Criteria for Contraceptive Use (UKMEC) categories for particular contraceptive methods in postpartum non-breastfeeding and breastfeeding women⁵⁸

Contraceptive method	Non-breastfeeding women		Breastfeeding women	
	Time since delivery	UKMEC Category	Time since delivery	UKMEC Category
Combined hormonal contraception (i.e. COC, transdermal patch, vaginal ring)	<21 days	3	<6 weeks	4
	≥21 days	1	≥6 weeks to <6 months (fully or almost fully breastfeeding)	3
			≥6 weeks to <6 months (partial breastfeeding)	2
			>6 months	1
Progestogen-only pill	<21 days	1	<6 weeks	1 ^b
	≥21 days	1	6 weeks onwards (fully or partial breastfeeding)	1
Progestogen-only implant	<21 days	1	<6 weeks	1 ^b
	≥21 days	1	6 weeks onwards (fully or partial breastfeeding)	1
Progestogen-only injectables	<21 days	1	<6 weeks	2 ^b
	≥21 days	1	6 weeks onwards (fully or partial breastfeeding)	1
Cu-IUD ^a and LNG-IUS ^a (including post-Caesarean section)	48 hours to 4 weeks	3	48 hours to 4 weeks	3
	≥4 weeks	1	≥4 weeks	1
	Puerperal sepsis	4	Puerperal sepsis	4
Progestogen-only emergency contraception	<21 days	Not required	<21 days	Not required
	≥21 days	1	≥21 days	1
Emergency Cu-IUD	≥4 weeks	1	>4 weeks	1
Diaphragms/caps	≥6 weeks	1	≥6 weeks	1
Condoms	From delivery	1	From delivery	1

^aWHOMEK indicates <48 hours insertion of Cu-IUD is Category 1; LNG-IUS is Category 1 not breastfeeding and Category 3 breastfeeding.

^bWHOMEK indicates Category 3 for use of progestogen-only methods prior to 6 weeks.

COC, combined oral contraception; Cu-IUD, copper-bearing intrauterine device; LNG-IUS, levonorgestrel-releasing intrauterine system; WHOMEK, World Health Organization Medical Eligibility Criteria for Contraceptive Use.

5.6 How to advise women on starting specific methods postpartum

Details on when individual methods can be started can be found within the CEU's method-specific guidance.^{61–66} Clinicians should attempt to exclude current pregnancy or recent risk of pregnancy (Box 3) and should advise women of any need for additional contraception.

It may not be possible to exclude pregnancy if a woman presents within 3 weeks of unprotected sexual intercourse (UPS). If the woman is likely to continue to be at risk of pregnancy, a clinician may judge that the benefits of starting contraception immediately outweigh the risks to any subsequently diagnosed pregnancy. Emergency contraception (EC) should be given if indicated, and the possibility of undiagnosed pregnancy and any potential risks must be discussed with the woman, emphasising the need for follow-up and a pregnancy

test no sooner than 3 weeks since last UPSI.^{67–69} So-called ‘quick starting’ a hormonal method at the time a woman presents for contraception, rather than at the beginning of her cycle, is outside the terms of the product licence.

C Women can be advised that contraception is not required before Day 21 postpartum. If starting a hormonal method on or before Day 21 there is no need for additional contraception.

C If starting a hormonal method after Day 21, clinicians should be reasonably sure that the woman is not pregnant or at risk of pregnancy (Box 3), and should advise that she avoids sex or uses additional contraception for the first 7 days of use (2 days for POP), unless fully meeting LAM criteria.

5.6.1 Combined hormonal contraception

In the first 3 weeks postpartum there is theoretically an increased risk of thrombosis in women starting CHC.⁵⁸ Blood coagulation and fibrinolysis are essentially normal by 3 weeks postpartum, at which time CHC may be commenced by non-breastfeeding women who have no contraindications.⁵⁸

In breastfeeding women, UKMEC⁵⁸ indicates that the use of CHC should be avoided in the first 6 weeks postpartum. Between 6 weeks and 6 months postpartum, use of CHC should only be considered in fully breastfeeding women if alternative methods are unacceptable.⁵⁸ The use of CHC in breastfeeding women is outside the terms of the product licence.

C CHC should not be commenced before Day 21 due to the increased risk of thrombosis. Non-breastfeeding women may start CHC from Day 21 postpartum.

C Breastfeeding women should avoid CHC in the first 6 weeks postpartum as there is insufficient evidence to prove the safety of CHC use while establishing breastfeeding.

✓ Use of CHC between 6 weeks and 6 months should not be recommended in fully breastfeeding women unless other methods are not acceptable or available. In partially or token breastfeeding women the benefits of CHC use may outweigh the risks.

5.6.2 Progestogen-only pill

The POP can be started at any time following delivery in both breastfeeding and non-breastfeeding women. If starting the POP after Day 21, the CEU recommends that additional contraception is advised for the first 48 hours⁶⁶ although the Summaries of Product Characteristics (SPCs) for POPs advise 7 days.⁷⁰

✓ Postpartum women (breastfeeding and non-breastfeeding) can start the POP at any time postpartum.

5.6.3 Progestogen-only injectables

In non-breastfeeding women the SPCs for DMPA and norethisterone enantate (NET-EN)⁷⁰ recommend that DMPA should be started within 5 days postpartum, and that NET-EN can be used immediately following delivery. In breastfeeding women the use of DMPA before 6 weeks postpartum is outside the product licence. A progestogen-only injectable may, however, be considered before 6 weeks postpartum in situations where breastfeeding women are at risk of pregnancy and unwilling to consider alternative contraceptive methods. The CEU advises that if a progestogen-only injectable is used in breastfeeding women then the first injection should be postponed until Day 21. Women should be advised of bleeding which can be associated with use, particularly in the immediate puerperium.^{71,72}

Box 3 Criteria for excluding pregnancy

Clinicians can be ‘reasonably certain’ that a woman is not pregnant if any of the following criteria are met:

- She has not had intercourse since last normal menses.
- She has been correctly and consistently using a reliable method of contraception.
- She is within 7 days of the onset of normal menses.*
- She is within 4 weeks postpartum for non-lactating women.*
- She is fully or nearly fully breastfeeding, amenorrhoeic, and less than 6 months postpartum.

*Although the woman is not **currently** pregnant she may be **at risk of pregnancy** if she has had unprotected sexual intercourse up to 7 days prior to starting the **LNG-IUS** or **traditional POP** as these methods do not reliably suppress ovulation and have a delayed inhibitory effect on implantation.

- C** Non-breastfeeding women can start a progestogen-only injectable method at any time postpartum.
- C** Breastfeeding women should not start a progestogen-only injectable method before Day 21 unless the risk of subsequent pregnancy is high.
- C** Women should be advised that troublesome bleeding can occur with use of DMPA in the early puerperium.

5.6.4 Progestogen-only implants

The SPC for the etonorgestrel implant (Implanon®)⁷⁰ recommends insertion between 21 and 28 days after delivery, and that based on the available data the etonogestrel implant can be used during lactation. If a woman is at risk of pregnancy and is unlikely to attend for medical care, the CEU suggests that an etonogestrel implant may be considered before Day 21. There is no evidence to suggest that Implanon is more likely to cause bleeding when inserted at this time, but women should be encouraged to report bleeding problems so that other causes can be excluded.

- ✓** If more convenient, breastfeeding and non-breastfeeding women can choose to have a progestogen-only implant inserted before Day 21, although this is outside the product licence for Implanon®.

5.6.5 Intrauterine methods

Evidence suggests that immediate postpartum insertions are safe and effective, although expulsion rates may be higher with immediate and early postpartum insertion.^{73,74} UKMEC indicates that due to increased risk of perforation, insertion of intrauterine methods should be delayed until 4 weeks postpartum.⁵⁸ An intrauterine method may be inserted from 4 weeks postpartum irrespective of mode of delivery or feeding.⁵⁸ All women undergoing an insertion of an intrauterine method should be informed about signs of expulsion, how to check for threads and the need to return for follow-up either 3–6 weeks after insertion, after their next menstrual period or earlier if problems arise.

- C** Unless a Cu-IUD can be inserted within the first 48 hours postpartum (breastfeeding and non-breastfeeding women), insertion should be delayed until Day 28 onwards. No additional contraception is required.
- C** A LNG-IUS can be inserted from Day 28 postpartum (breastfeeding and non-breastfeeding women). Women should avoid sex or use additional contraception for 7 days after insertion unless fully meeting LAM criteria.

5.6.6 Barrier methods

Condoms (male and female) can be used without restriction at any time postpartum.⁵⁸ Even in the presence of another contraceptive method, the correct and consistent use of condoms should be advised to protect against STIs including HIV. Use of non-oil-based lubricant with condoms is advised to reduce the risk of breakage.⁶¹

Diaphragms and caps are not recommended until 6 weeks postpartum⁵⁸ when changes to the genital tract anatomy are thought to be complete and discomfort has usually resolved. A different size of diaphragm or cervical cap may be required for postpartum women who have used this method previously. Another method of contraception should be used from Day 21 until the woman is able to insert and remove a correctly fitted diaphragm or cap. It is recommended that diaphragms and caps are used with spermicide.⁷⁵ The only spermicide available in the UK is nonoxinol-9 (N-9); however N-9 has been shown to cause epithelial disruption in the vagina and anus,^{76,77} which may increase susceptibility to HIV if exposed. Consequently, whilst the CEU recommends the use of N-9 with caps and diaphragms, use of these contraceptive methods may not be appropriate (UKMEC Category 3) for women at high risk of HIV.⁵⁸

- C** Women who choose a diaphragm or cervical cap should be advised to wait at least 6 weeks postpartum before attending for assessment of size requirement.

5.6.7 Sterilisation

There is no medical condition that would absolutely restrict a person's eligibility for sterilisation, although precautions may be necessary for some individuals.⁵⁸ Sterilisation is anticipated to be a permanent procedure and therefore it is vital that both women and men are sure about their decision before proceeding. Those considering sterilisation should be informed about all methods of contraception and be advised that some LARC methods have failure rates comparable with female sterilisation.²⁷ Detailed information should be given about both male and female sterilisation, including the lower failure rate and lower risk of major complications associated with vasectomy compared to tubal occlusion and lower risk of major complications.⁷⁸ Effective contraception is required throughout the cycle in which female sterilisation takes place.

Some women will experience regret following sterilisation,⁷⁸ therefore it is important that pre-procedure counselling is available. Women should not be sterilised during Caesarean section unless counselling has taken place at least a week before the operation.⁷⁸ The Royal College of Obstetricians and Gynaecologists' guidance⁷⁸ on male and female sterilisation provides detailed information on best practice.

- ✓ **Women and men considering sterilisation should be informed of the permanence of the procedure; about the risks, benefits and failure rates associated with sterilisation; and about other methods of contraception including LARC.**

5.6.8 Emergency contraception

The Cu-IUD is thought to be 99% effective if inserted within the first 5 days of UPSI, whilst POEC is thought to be around 84% effective if taken within 72 hours of UPSI.⁷⁹ Both the Cu-IUD and POEC can be used for EC in the postpartum period and therefore women should be given information about both methods. Neither method is required in postpartum women if UPSI occurs before Day 21 postpartum. For UPSI after Day 21, POEC can be used in both breastfeeding and non-breastfeeding women without restriction (UKMEC Category 1). The Cu-IUD should not be inserted before Day 28 postpartum.

As the earliest date of ovulation is predicted to be Day 28, if UPSI occurs in Days 21–27 the Cu-IUD can be used for EC from Day 28 until Day 33 (i.e. 5 days after the earliest expected ovulation). A Cu-IUD inserted for emergency contraception can be retained until the next menstrual period and then removed, or it can remain retained for ongoing contraception for 5 years or more, depending on the device.

- ✓ **Women can be advised that UPSI or contraceptive failure before Day 21 postpartum is not an indication for emergency contraception.**
- ✓ **Women can be advised that POEC can be used from Day 21 onwards and the emergency Cu-IUD from Day 28 onwards.**

References

- 1 Woranitat W, Taneepanichskul S. Sexual function during the postpartum period. *J Med Assoc Thai* 2007; **90**: 1744–1748.
- 2 Barrett G, Pendry E, Peacock J, Victor C, Thakar R. Women's sexual health after childbirth. *Br J Obstet Gynaecol* 2000; **107**: 186–195.
- 3 Hicks TL, Goodall SF, Quattrone EM, Lydon-Rochelle MT. Postpartum sexual functioning and method of delivery: summary of the evidence. *J Midwifery Womens Health* 2004; **49**: 430–436.
- 4 Barrett G, Peacock J, Victor CR, Manyonda I. Cesarean section and postnatal sexual health. *Birth* 2005; **32**: 306–311.
- 5 van Brummen HJ, Bruinse HW, van de Pol G, Heintz APM, van der Vaart CH. Which factors determine the sexual function 1 year after childbirth? *Br J Obstet Gynaecol* 2006; **113**: 914–918.
- 6 von Sydow K. Sexuality during pregnancy and after childbirth: a metacontent analysis of 59 studies. *J Psychosom Res* 1999; **47**: 27–49.
- 7 National Collaborating Centre for Primary Care. *Postnatal Care: Routine Postnatal Care of Women and Their Babies* (Report No. 37). 2006. <http://www.nice.org.uk/nicemedia/pdf/CG037fullguideline.pdf> [Accessed 21 August 2009].
- 8 Hedayati H, Parsons J, Crowther CA. Topically applied anaesthetics for treating perineal pain after childbirth. *Cochrane Database Syst Rev* 2005; **2**: CD004223.
- 9 East CE, Begg L, Henshall NE, Marchant P, Wallace K. Local cooling for relieving pain from perineal trauma sustained during childbirth. *Cochrane Database Syst Rev* 2007; **4**: CD006304.
- 10 Home Office. Crime Reduction: Domestic Violence Mini-site. <http://www.crimereduction.homeoffice.gov.uk/dv/dv01.htm> [Accessed 21 August 2009].
- 11 Department of Health. *Responding to Domestic Abuse: A Handbook for Health Professionals*. 2005. http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4126161 [Accessed 21 August 2009].
- 12 NHS Scotland. *Responding to Domestic Abuse. Guidelines for Healthcare Workers in Scotland*. 2003. <http://www.scotland.gov.uk/Publications/2003/03/16658/19383> [Accessed 21 August 2009].
- 13 Glasier A, McNeilly AS, Howie PW. Hormonal background of lactational infertility. *Int J Fertil* 1988; **33**(Suppl.): 32–34.
- 14 Faculty of Family Planning and Reproductive Health Care Clinical Effectiveness Unit. The use of contraception outside the terms of the product licence. *J Fam Plann Reprod Health Care* 2005; **31**: 225–242. http://www.ffprhc.org.uk/admin/uploads/518_ContraceptionProductLicence.pdf [Accessed 21 August 2009].
- 15 McNeilly AS. Neuroendocrine changes and fertility in breast-feeding women. *Prog Brain Res* 2001; **133**: 207–214.
- 16 Glasier A, McNeilly AS, Howie PW. Fertility after childbirth: changes in serum gonadotrophin levels in bottle and breast feeding women. *Clin Endocrinol* 1983; **19**: 493–501.
- 17 Tay CC, Glasier AF, McNeilly AS. The 24 h pattern of pulsatile luteinizing hormone, follicle stimulating hormone and prolactin release during the first 8 weeks of lactational amenorrhoea in breastfeeding women. *Hum Reprod* 1992; **7**: 951–958.
- 18 Glasier A, McNeilly AS, Howie PW. The prolactin response to suckling. *Clin Endocrinol* 1984; **21**: 109–116.
- 19 McNeilly AS, Glasier AF, Howie PW, Houston MJ, Cook A, Boyle H. Fertility after childbirth: pregnancy associated with breast feeding. *Clin Endocrinol* 1983; **18**: 167–173.
- 20 McNeilly AS, Howie PW, Houston MJ, Cook A, Boyle H. Fertility after childbirth: adequacy of post-partum luteal phases. *Clin Endocrinol* 1982; **17**: 609–615.
- 21 World Health Organization Task Force on Methods for the Natural Regulation of Fertility. The World Health Organization Multinational Study of Breast-feeding and Lactational Amenorrhea. III. Pregnancy during breast-feeding. *Fertil Steril* 1999; **72**: 431–440.
- 22 Smith GC, Pell JP, Dobbie R. Interpregnancy interval and risk of preterm birth and neonatal death: retrospective cohort study. *BMJ* 2003; **327**: 313 (published correction appears in *BMJ* 2003; **327**: 851).
- 23 Conde-Agudelo A, Rosas-Bermudez A, Kafury-Goeta AC. Birth spacing and risk of adverse perinatal outcomes: a meta-analysis. *JAMA* 2006; **295**: 1809–1823.
- 24 Hiller JE, Griffith E, Jenner F. Education for contraceptive use by women after childbirth. *Cochrane Database Syst Rev* 2002; **3**: CD001863.
- 25 Glasier AF, Logan J, McGlew TJ. Who gives advice about postpartum contraception? *Contraception* 1996; **53**: 217–220.
- 26 National Institute for Health and Clinical Excellence (NICE). *Long-acting Reversible Contraception: The Effective and Appropriate Use of Long-acting Reversible Contraception*. 2005. <http://www.nice.org.uk/pdf/CG030fullguideline.pdf> [Accessed 21 August 2009].
- 27 Trussell J. Summary table of contraceptive efficacy. In: Hatcher RA, Trussell J, Nelson AL, Cates W, Stewart FH, Kowal D (eds), *Contraceptive Technology* (19th edn). New York, NY: Ardent Media, 2007.
- 28 Velazquez JG, Gallegos VC, Lopez AS, Bondani A. Effects of the daily administration of 0.350 mg of norethindrone on breastfeeding and milk composition. *Ginecol Obstet Mex* 1976; **40**: 31–39.
- 29 Truitt ST, Fraser AB, Grimes DA, Gallo MF, Schulz KF. Hormonal contraception during lactation: systematic review of randomized controlled trials. *Contraception* 2003; **68**: 233–238.
- 30 Truitt ST, Fraser AB, Grimes DA, Gallo MF, Schulz KF. Combined hormonal versus nonhormonal versus progestin-only contraception in lactation. *Cochrane Database Syst Rev* 2003; **2**: CD003988.
- 31 Tankeyoon M, Dusitain N, Chalapati S, Koetsawang S, Saibiang S, Sas M, *et al*. Effects of hormonal contraceptives on milk volume and infant growth: WHO special programme of research, development and research training in human reproduction. *Contraception* 1984; **30**: 505–522.
- 32 Kamal I, Hefnawi F, Ghoneim M, Talaat M, Younis N, Tagui A, *et al*. Clinical biomedical and experimental studies on lactation. II. Clinical effects of gestagens on lactation. *Am J Obstet Gynecol* 1969; **105**: 324–334.
- 33 Gupta AN, Mathur VS, Garg SK. Effect of oral contraceptives on quantity and quality of milk secretion in human beings. *Ind J Med Res* 1974; **62**: 964–970.
- 34 Lönnerdal B, Forsum E, Hambraeus L. Effect of oral contraceptives on composition and volume of breast milk. *Am J Clin Nutr* 1980; **33**: 816–824.

- 35 Bjarnadóttir RI, Gottfredsdóttir H, Sigurdardóttir K. Desogestrel-only pill and breastfeeding. *Br J Obstet Gynaecol* 2001; **108**: 1174–1180.
- 36 Gomez-Rogers C, Ibarra Polo AA, Faudes A, Guiloff E. Effect of the IUD and other contraceptive methods on lactation. *IPPF Proceedings of the 8th International Conference of the IPPF, Santiago, Chile, 9–15 April 1967*. London, UK: IPPF, 1967; 328–334.
- 37 Guiloff E, Ibarra-Polo A, Zanartu J, Toscanini C, Mischler IW, Gomez-Rogers C. Effects of contraception on lactation. *Am J Obstet Gynecol* 1974; **118**: 42.
- 38 Huber DH, Khan AR, Brown D, Malakar M, Wait G. Oral and injectable contraceptives: effects on breast milk and child growth in Bangladesh. In: Zatuchni GI, Labbok JJ, Sciarra JJ (eds), *Research Frontiers in Fertility Regulation. Proceedings of an International Workshop on Research Frontiers in Fertility Regulation, Mexico City, Mexico, 11–14 February 1980*. Hagerstown, MD: Harper and Row, 1980.
- 39 Karim K, Ammar R, Mahgoub E, Ganzoury E, Fikri B, Abdou I. Injected progestogen and lactation. *BMJ* 1971; **1**: 200–203.
- 40 Reinprayoon D, Taneepanichskul S, Bunyavejchevin B, Thaithumyanon P, Punnahitananda S, Tosukhowong P, et al. Effects of the etonogestrel-releasing contraceptive implant (Implanon) on parameters of breastfeeding compared to those of an intrauterine device. *Contraception* 2000; **62**: 239–246.
- 41 Taneepanichskul S, Reinprayoon D, Thaithumyanon P, Praisuwanna P, Tosukhowong P, Dieben T. Effects of the etonogestrel-releasing implant Implanon and a non-medicated intrauterine device on the growth of breast-fed infants. *Contraception* 2006; **73**: 368–371.
- 42 Heikkilä M, Haukkamaa M, Luukkainen T. Levonorgestrel in milk and plasma of breast-feeding women with a levonorgestrel-releasing IUD. *Contraception* 1982; **25**: 41–49.
- 43 Shaamash AH, Sayed GH, Hussien MM, Shaaban MM. A comparative study of the levonorgestrel-releasing intrauterine system Mirena versus the Copper T380A intrauterine device during lactation: breast-feeding performance, infant growth and infant development. *Contraception* 2005; **72**: 346–351.
- 44 Diaz S, Zepeda A, Maturana X, Reyes MV, Miranda P, Casado ME, et al. Fertility regulation in nursing women IX. Contraceptive performance, duration of lactation, infant growth, and bleeding patterns during use of progesterone vaginal rings, progestin-only pills, Norplant™ implant, and copper T 380-A intrauterine devices. *Contraception* 1997; **56**: 223–232.
- 45 Aref I, Badraoui MHH, Hefnawi F. Contraception during lactation. *Contracept Deliv Syst* 1982; **3**: 47–51.
- 46 World Health Organization (WHO) Task Force on Oral Contraceptives SPoRDaRTiHR. Effects on hormonal contraceptives on breast milk composition and infant growth. *Stud Fam Plann* 1988; **19**: 361–369.
- 47 Gambrell RD. Immediate postpartum oral contraception. *Obstet Gynecol* 1970; **36**: 101–106.
- 48 Miller GH, Hughes LR. Lactation and genital involution effects of a new low-dose oral contraceptive on breast-feeding mothers and their infants. *Obstet Gynecol* 1970; **35**: 44.
- 49 Semm K, Dittmar F. Postpartum ovulation: inhibition and milk yield. *Curr Ther Res* 1966; **8**: 48.
- 50 Bayer plc. Levonelle One Step: Summary of Product Characteristics (SPC). 2007. <http://www.emc.medicines.org.uk/> [Accessed 21 August 2009].
- 51 Bayer plc. Levonelle 1500 mg: Summary of Product Characteristics (SPC). 2008. <http://www.emc.medicines.org.uk/> [Accessed 21 August 2009].
- 52 Gainer E, Massai R, Reyes V, Forcelledo ML, Caviedes R, Villarroel C, et al. Levonorgestrel pharmacokinetics in plasma and milk of lactating women who take 1.5 mg for emergency contraception. *Hum Reprod* 2007; **22**: 1578–1584.
- 53 Knight J, Pyper C. Postnatal contraception: what are the choices? *Nurs Pract* 2002; May: 23–25.
- 54 Ingram J, Hunt L, Woolridge M, Greenwood R. The association of progesterone, infant formula use and pacifier use with the return of menstruation in breastfeeding women: a prospective cohort study. *Eur Obstet Gynaecol Reprod Biol* 2004; **114**: 197–202.
- 55 Wei L, Qiu Y. Relation of supplementary feeding to resumption of menstruation and ovulation in lactating postpartum women. *Chin Med J* 2007; **120**: 868–870.
- 56 Romero-Gutierrez G, Vaca-Ortiz N, Ponce-Ponce de Leon AL, Lopez-Martinez G. Actual use of lactation amenorrhoea method. *Eur J Contracept Reprod Health Care* 2007; **12**: 340–344.
- 57 Lopez-Martinez MG, Romero-Gutierrez G, Ponce-Ponce de Leon AL. Acceptance of lactational amenorrhoea for family planning after postpartum counselling. *Eur J Contracept Reprod Health Care* 2006; **11**: 297–301.
- 58 Faculty of Sexual and Reproductive Health Care. *UK Medical Eligibility Criteria for Contraceptive Use (UKMEC 2009)*. 2009. <http://www.fsrh.org/admin/uploads/UKMEC2009.pdf> [Accessed 3 February 2010].
- 59 Fertility UK website. NHS practitioners with specialist training in LAM and fertility awareness methods. <http://www.fertilityuk.org> [Accessed 21 August 2009].
- 60 *British National Formulary*, Volume 57, Appendix 5. March 2009. <http://bnf.org/bnf/> [Accessed 21 August 2009].
- 61 Faculty of Family Planning and Reproductive Health Care Clinical Effectiveness Unit. *Condoms: Male and Female*. 2007. http://www.ffprhc.org.uk/admin/uploads/999_CEUguidanceMaleFemaleCondomsJan07.pdf [Accessed 21 August 2009].
- 62 Faculty of Family Planning and Reproductive Health Care Clinical Effectiveness Unit. *First Prescription of Combined Oral Contraception*. 2006. <http://www.ffprhc.org.uk/admin/uploads/FirstPrescriptionCombinedOralContraceptionCEU.pdf> [Accessed 21 August 2009].
- 63 Faculty of Family Planning and Reproductive Health Care Clinical Effectiveness Unit. *Intrauterine Contraception*. 2007. <http://www.ffprhc.org.uk/admin/uploads/CEUGuidanceIntrauterineContraceptionNov07.pdf> [Accessed 21 August 2009].
- 64 Faculty of Sexual and Reproductive Healthcare. *Progestogen-only Implants*. 2008. <http://www.ffprhc.org.uk/admin/uploads/CEUGuidanceProgestogenOnlyImplantsApril08.pdf> [Accessed 21 August 2009].
- 65 Faculty of Sexual and Reproductive Healthcare. *Progestogen-only Injectable Contraception*. 2009. <http://www.ffprhc.org.uk/admin/uploads/CEUGuidanceProgestogenOnlyInjectables09.pdf> [Accessed 21 August 2009].
- 66 Faculty of Sexual and Reproductive Healthcare. *Progestogen-only Pills*. 2009. <http://www.ffprhc.org.uk/admin/uploads/CEUGuidanceProgestogenOnlyPill09.pdf> [Accessed 21 August 2009].

- 67 Butler SA, Khanlian SA, Cole LA. Detection of early pregnancy forms of human chorionic gonadotrophin by home pregnancy test devices. *Clin Chem* 2001; **47**: 2131–2136.
- 68 Wilcox AJ, Day BD, Dunson D, McChesney R, Weinberg CR. Natural limits of pregnancy testing in relation to the expected menstrual period. *JAMA* 2001; **286**: 1759–1762.
- 69 Cole LA, Khanlian SA, Sutton JM, Davies S, Rayburn WF. Accuracy of home pregnancy tests at the time of missed menses. *Am J Obstet Gynecol* 2004; **190**: 100–105.
- 70 Datapharm Communications Limited. electronic Medicines Compendium (eMC). Summaries of Product Characteristics (SPCs). <http://www.emc.medicines.org.uk> [Accessed 21 August 2009].
- 71 Pharmacia. Depo-Provera: Summary of Product Characteristics (SPC). 2007. <http://www.emc.medicines.org.uk> [Accessed 21 August 2009].
- 72 Hurley R, Asscher AW, Kennedy I, Jacobs HS, Langley FA, Leonard BJ. Report of the panel of persons appointed by the Licensing Authority to hear the application by UpJohn Ltd for a product licence to market the drug Depo-Provera as a longterm contraceptive. London, UK: Department of Health and Social Security, 1984.
- 73 Grimes DA, Schulz KF, Van Vliet HHAAM, Stanwood NL, Lopez LM. Immediate post-partum insertion of intrauterine devices. *Cochrane Database Syst Rev* 2007; **4**: CD003036.
- 74 Eroglu K, Akkuzu G, Vural G, Dilbaz B, Aking A, Taskin L, *et al.* Comparison of efficacy and complications of IUD insertion in immediate postplacental/early postpartum period with interval period: 1 year followup. *Contraception* 2006; **74**: 376–381.
- 75 Faculty of Family Planning and Reproductive Health Care Clinical Effectiveness Unit. *Female Barrier Methods*. 2007. <http://www.ffprhc.org.uk/admin/uploads/CEUGuidanceFemaleBarrierMethods072007.pdf> [Accessed 21 August 2009].
- 76 World Health Organization. *WHO/CONRAD Technical Consultation on Nonoxynol-9: Summary Report*. 2003. http://www.who.int/entity/reproductivehealth/publications/rtis/RHR_03_8/en/ [Accessed 21 August 2009].
- 77 Phillips DM, Taylor CL, Zacharopoulos VR, Maguire RA. Nonoxynol-9 causes rapid exfoliation of sheets of rectal epithelium. *Contraception* 2006; **63**: 149–154.
- 78 Royal College of Obstetricians and Gynaecologists (RCOG). *Male and Female Sterilisation* (Evidence-based Clinical Guideline Number 4). 2004. <http://www.rcog.org.uk/files/rcog-corp/uploaded-files/NEBSterilisationFull060607.pdf> [Accessed 21 August 2009].
- 79 Faculty of Family Planning and Reproductive Health Care Clinical Effectiveness Unit. Emergency contraception. *J Fam Plann Reprod Health Care* 2006; **32**: 121–128. http://www.ffprhc.org.uk/admin/uploads/449_EmergencyContraceptionCEUGuidance.pdf [Accessed 21 August 2009].

APPENDIX 1: DEVELOPMENT OF CEU GUIDANCE

GUIDELINE DEVELOPMENT GROUP

Dr Louise Melvin – Director, Clinical Effectiveness Unit (CEU)

Ms Julie Craik – Researcher, Clinical Effectiveness Unit (CEU)

Dr Catrina Bain – Consultant Obstetrician and Gynaecologist, Glasgow Royal Infirmary, Glasgow

Dr Audrey Brown – Clinical Effectiveness Committee Chairperson; Consultant in Sexual and Reproductive and Sexual Health, Sandyford, NHS Greater Glasgow and Clyde, Glasgow

Dr Louise Cook – General Practitioner, Risca; Associate Specialist in Sexual and Reproductive Health, Gwent Healthcare NHS, Wales

Ms Lorraine Forster – Education Committee Member; Head of Nursing, Sandyford, NHS Greater Glasgow and Clyde, Glasgow

Mrs Susan Key – Royal College of Midwives representative; Lecturer, Napier University, Edinburgh

Mrs Jennifer Pflieger – User representative (written feedback)

Dr Margaret Thomson – Consultant Obstetrician and Gynaecologist, Ninewells Hospital, Dundee

Dr Karen Trewnard – FSRH Council Member; Senior Specialty Doctor, Department of Sexual Health, West Hill House, Winchester

Dr Alison Vaughan – Clinical Director and Psychosexual Medicine Specialist, Contraceptive Health Service, Poole

INDEPENDENT PEER REVIEWERS

Professor Linan Cheng – Director, Centre for Clinical Research and Training, Shanghai Institute of Planning Parenthood Research, Shanghai, China

Professor Zephne van der Spuy – Head of Department, Faculty of Health Sciences, Department of Obstetrics and Gynaecology, University of Cape Town, South Africa

No competing interests were noted by members of the multidisciplinary group. Administrative support to the CEU team was provided by **Ms Janice Paterson**.

CEU guidance is developed in collaboration with the Clinical Effectiveness Committee of the FSRH. The CEU guidance development process employs standard methodology and makes use of systematic literature review and a multidisciplinary group of professionals. The multidisciplinary group is identified by the CEU for their expertise in the topic area, and typically includes clinicians working in family planning, sexual and reproductive health care, general practice, other allied specialities, and user representation. In addition, the aim is to include a representative from the FSRH Clinical Effectiveness Committee, the FSRH Education Committee and FSRH Council in the multidisciplinary group.

Evidence is identified using a systematic literature review and electronic searches are performed for: MEDLINE (CD Ovid version) (1996–2009); EMBASE (1996–2009); PubMed (1996–2009); The Cochrane Library (to 2009) and the US National Guideline Clearing House. The searches are performed using relevant medical subject headings (MeSH), terms and text words. The Cochrane Library is searched for systematic reviews, meta-analyses and controlled trials relevant to intrauterine contraception. Previously existing guidelines from the FSRH (formerly the Faculty of Family Planning and Reproductive Health Care), the Royal College of Obstetricians and Gynaecologists (RCOG), the World Health Organization (WHO) and the British Association for Sexual Health and HIV (BASHH), and reference lists of identified publications, are also searched. Similar search strategies have been used in the development of other national guidelines. Selected key publications are appraised using standard methodological checklists similar to those used by the National Institute for Health and Clinical Excellence (NICE). All papers are graded according to the Grades of Recommendations Assessment, Development and Evaluation (GRADE) system. Recommendations are graded as in the table on the inside front cover of this document using a scheme similar to that adopted by the RCOG and other guideline development organisations. The clinical recommendations within this guidance are based on evidence whenever possible. Summary evidence tables are available on request from the CEU. An outline of the guideline development process is given in the table on the inside back cover of this guidance document.

APPENDIX 2: CONTRACEPTIVE METHODS AVAILABLE IN THE UK*

(1) HORMONAL METHODS		
Method	Progestogen	Brand names
Combined oral contraception (COC) – monophasic pills 20 µg Ethinylestradiol	Norethisterone Desogestrel Gestodene	Loestrin 20 Mercilon Femodette, Sunya 20/75
30 µg Ethinylestradiol	Levonorgestrel Norethisterone Desogestrel Gestodene Drospirenone	Microgynon 30, Ovranette Loestrin 30 Marvelon Femodene, Katya 30/75 Yasmin
35 µg Ethinylestradiol	Norethisterone Norgestimate	Brevinor, Norimin, Ovysmen Cilest
50 µg Mestranol (= 35 µg Ethinylestradiol)	Norethisterone	Norinyl-1
Combined oral contraception (COC) – phasic pills Ethinylestradiol	Levonorgestrel Norethisterone Gestodene	Logynon BiNovum, Synphase, TriNovum Triadene
Estradiol valerate	Dienogest	Qlaira
Combined patch Ethinylestradiol	Norelgestromin	Evra
Combined vaginal ring (CVR) Ethinylestradiol	Etonogestrel	NuvaRing
Progestogen-only pill (POP) Desogestrel POP (inhibits ovulation)	Desogestrel	Cerazette
Traditional POPs	Levonorgestrel Norethisterone Etyndiol	Norgeston Noriday, Micronor Femulen
Progestogen-only injectable	Medroxyprogesterone acetate Norethisterone enantate	Depo-Provera Noristerat
Progestogen-only implant	Etonogestrel	Implanon
Intrauterine system	Levonorgestrel	Mirena
Hormonal emergency contraception	Levonorgestrel	Levonelle One Step, Levonelle 1500
(2) NON-HORMONAL METHODS		
Method	Examples	
Intrauterine	Copper-bearing intrauterine device	
Barrier	Male condom, Female condom, Diaphragm, Cap	
Fertility awareness	Lactational amenorrhoea method, Persona™ device, Calendar, Basal body temperature, Cervical mucus (Billings), Cervical palpation, Sympto-thermal (combination of natural methods)	

*Current as of September 2009.

Discussion Points for Postnatal Sexual and Reproductive Health

The following discussion points have been developed by the FSRH Education Committee.

Discussion Points	
1	A woman asks for an intrauterine system to be fitted 21 days after her Caesarean section. She is fully breastfeeding. She had 'unprotected' intercourse with her husband 2 nights previously. How would you advise this woman?
2	How would you counsel a pregnant woman who requests sterilisation?
3	Discuss the potential benefits to women of choosing a long-acting reversible contraception (LARC) method.

Questions for Postnatal Sexual and Reproductive Health

The following questions and answers have been developed by the FSRH Education Committee.

Indicate your answer by ticking the appropriate box for each question

	True	False
1 Depot medroxyprogesterone acetate (DMPA) can be used without restriction (UKMEC Category 1) in breastfeeding women before 6 weeks postpartum.	<input type="checkbox"/>	<input type="checkbox"/>
2 The lactational amenorrhoea method (LAM) is 98% effective if the woman is amenorrhoeic, <6 months postpartum and fully breastfeeding.	<input type="checkbox"/>	<input type="checkbox"/>
3 The contraceptive implant can be inserted on Day 21 without the need for additional contraception.	<input type="checkbox"/>	<input type="checkbox"/>
4 Combined hormonal contraception (CHC) should not be commenced until Day 28 postpartum due to the possible increased risk of thrombosis.	<input type="checkbox"/>	<input type="checkbox"/>
5 CHC should not be used by women with a history of hypertension in pregnancy regardless of current blood pressure.	<input type="checkbox"/>	<input type="checkbox"/>
6 Diaphragm fitting should be delayed until 6 weeks postpartum.	<input type="checkbox"/>	<input type="checkbox"/>
7 The earliest predicted time of ovulation for a postnatal non-breastfeeding woman is 21 days postpartum.	<input type="checkbox"/>	<input type="checkbox"/>
8 The risk of a woman experiencing domestic violence is increased in the postnatal period.	<input type="checkbox"/>	<input type="checkbox"/>
9 Intrauterine methods can be inserted at any time in the postnatal period.	<input type="checkbox"/>	<input type="checkbox"/>
10 Progestogen-only hormonal contraception can adversely affect infant growth.	<input type="checkbox"/>	<input type="checkbox"/>

Answers	10 False	9 False	8 True	7 False	6 True
	5 False	4 False	3 True	2 True	1 False

STEPS INVOLVED IN THE DEVELOPMENT OF CEU GUIDANCE

STEP	TIME TAKEN
<p>Formulation of key clinical questions by the Clinical Effectiveness Unit (CEU).</p> <p>Systematic literature review involving searching electronic, bibliographic databases by CEU researcher.</p> <p>Obtaining and reviewing copies of the full papers of all relevant publications identified through the searches.</p> <p>Formal, critical appraisal of key papers and development of short evidence tables.</p>	<p>This process must be completed in a maximum of 8 weeks.</p>
<p>Draft one guidance document is written providing recommendations and good practice points based on the literature review.</p>	<p>The CEU has overall responsibility for writing the guidance document. The multidisciplinary group and other peer reviewers should highlight inconsistencies, errors, omissions or lack of clarity.</p>
<p>Peer review by multidisciplinary group comprising stakeholders and including service user representation; representation from the Faculty of Sexual and Reproductive Healthcare (FSRH) Education Committee; and where possible representation from the FSRH Clinical Effectiveness Committee (CEC) and FSRH Council.</p>	
<p>Preparation of draft two guidance document based on written comments of peer reviewers.</p>	
<p>Multidisciplinary group meet to discuss draft two.</p>	<p>A one-day meeting of the multidisciplinary group is held to discuss draft two.</p>
<p>Preparation of draft three based on discussion at the multidisciplinary group meeting.</p>	
<p>Peer review of draft three by the multidisciplinary group, the FSRH CEC and two independent peer reviewers.</p>	
<p>Preparation of draft four based on written comments.</p>	
<p>Draft four is prepared and is sent to the multidisciplinary group, FSRH CEC and independent peer reviewers.</p>	<p>Minor comments can be accepted at this stage.</p>
<p>Final guidance document published by the FSRH.</p>	<p>Proofreading of guidance document by three members of the CEU team independently. Comments collated by the Unit Director. A pdf version of the guidance is available on the FSRH website.</p>

COMMENTS AND FEEDBACK ON PUBLISHED GUIDANCE

All comments on published guidance can be sent directly to the Clinical Effectiveness Unit (CEU) at ceu.members@ggc.scot.nhs.uk.

You will receive an automated acknowledgment on receipt of your comments. If you do not receive this automated response please contact the CEU by telephone [+44 (0) 141 232 8459/8460] or e-mail (ceu.members@ggc.scot.nhs.uk).

The CEU is unable to respond individually to all feedback. However, the CEU will review all comments and provide an anonymised summary of comments and responses which, after review by the Clinical Effectiveness Committee, will be posted on the Faculty website (www.fsrh.org).