



Federation of Reproductive
Association of Malaysia



Obstetrical & Gynaecological
Society of Malaysia

Long Acting Reversible Contraceptives (LARC) Guidelines for Malaysia

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Introduction

Roughly 121 million unintended pregnancies occurred each year between 2015 and 2019. Of these unintended pregnancies, 61% ended in abortion. This translates to 73 million abortions per year¹.

Among one of the reasons for unintended pregnancies is contraceptive method failure whereby patient-dependent methods such as combined oral contraceptives (COC) have higher failure rates compared to non-patient dependent methods such as implant or intrauterine contraceptive devices. The consistent use of contraceptives has been shown to be responsible for very low rates of unintended pregnancies.

Studies in the US in 2012 have shown that for women at risk of unintended pregnancies, 65% of those women who consistently used contraception accounted for only 5% of unintended pregnancies. Conversely, 35% of women who did not use contraception or used contraception inconsistently accounted for 95% of unintended pregnancies².

Global statistics show that 50% of unintended pregnancies end in abortion³.

The latest global data for the rate of abortions (2008 figure published in 2012) is quoted at 28 per 1000 women aged 15 to 44 years⁴.

The Contraceptive CHOICE Project study published in 2012 concluded that users of pills, patches and rings had 20 times the risk of unintended pregnancies compared to LARC⁵.

In addition, the American College of O&G Committee Opinion in 2012 stated that IUDs and implants are the best reversible methods for preventing unintended pregnancies, rapid repeat pregnancies & abortions in young women⁶.

From a cost perspective, NICE Guidance on LARC has shown that the annual costs of LARCs per user are lower compared to both COC and condoms⁷.

Summary of Recommendations

The Following Recommendations and Conclusions are based on good and consistent scientific evidence (Level A)

1) Is routine antibiotic prophylaxis needed prior to IUD insertion⁶?

Routine antibiotic prophylaxis to prevent pelvic infection is not recommended before IUD insertion.

The Following recommendations and conclusions are based on limited or inconsistent scientific evidence (Level B)

1) Postpartum insertion⁶

Immediate postpartum initiation of the contraceptive implant should be offered routinely as a safe and effective option for postpartum contraception, regardless of breastfeeding status⁷.

Immediate postpartum insertion of an intrauterine device (IUD) within 10 minutes of placental separation appears safe and effective¹⁸. In addition Intrauterine device can be inserted up to 48 hrs after childbirth²⁴.

2) Post abortion⁶

Insertion of an intrauterine devices (IUD) or implant immediately after either an abortion or miscarriage is safe and effective.

3) Ectopic pregnancy⁶

Intrauterine devices (IUD) may be offered to women with a history of ectopic pregnancy.

The risk of ectopic pregnancy associated with the use of IUD is lower than using no contraception.

The Following recommendations and conclusions are based primarily on consensus and expert opinion (Level C).

1) Are LARCs suitable for nulliparous women⁶?

Nulliparous women and adolescents can be offered LARCs which include intrauterine devices (IUD).

2) When is an appropriate time to insert an intrauterine device (IUD) or implant⁶?

Insertion of an IUD or Implant may occur at any time during the menstrual cycle as long as pregnancy can be reasonably excluded.

3) Effects of LARCs on menstrual patterns and bleeding⁶

LARCs have an effect on menstrual bleeding and patients should be given anticipatory guidance about these effects.

4) Is routine screening for STIs required before IUD or implant insertion⁶?

For women at high risks of STIs, it is reasonable to screen for STIs and place the IUD on the same day.

Objectives and Scope

These guidelines are intended for use by healthcare professionals providing Long Acting Reversible Contraception (LARC).

For the purpose of these guidelines, Long Acting Reversible Contraceptives include contraceptive implants, copper intrauterine devices (IUD) and levonorgestrel intrauterine systems (IUS).



Why Guidelines for Long Acting Reversible Contraception (LARC) are Needed in Malaysia

In contraceptive practice, there are many guidelines from various authorities such as the World Health Organisation (WHO), Faculty of Sexual and Reproductive Health (FRSH) and the American College of Obstetricians and Gynecologists (ACOG).

Clinical practice guidelines are an important tool in applying evidence –based medicine to patient care⁸.

The use of guidelines and protocols have been shown to reduce patient harm and improve outcomes through improved standardisation and communication⁹.

LARCs usage in Malaysia recorded in 2014 averaged about 2.7% for IUD (from 4.5% 2004) and 0.7% for the Implant (from 0.4% 2004) as compared to 13.2% for pill (from 14% 2004)¹⁰.

Studies have shown the lowest typical user failure rates for the implant at 0.05%, vasectomy at 0.15%, tubal sterilisation at 0.5%, IUS at 0.2% and copper IUD at 0.8% as compared to contraceptive pills at 9%¹¹. Contraceptive implants have been shown to be one of the most effective methods.

The LARCs available in Malaysia are the contraceptive implant (IMP), the copper intrauterine device (IUD) and the levonorgestrel intrauterine system (IUS).

They share these common advantages over other methods:

- 1) Independent from user adherence/compliance
- 2) Have the highest effectiveness and continuation rates¹¹
- 3) Do not require frequent visits to a medical practitioner
- 4) Highly cost-effective¹²
- 5) Reversible with a rapid return to fertility after removal¹³⁻¹⁵
- 6) Have very few or no health risks and therefore very few contraindications

LARC methods have few contraindications and almost all women are eligible for an implant, copper IUD or IUS. The World Health Organization Medical Eligibility Criteria (WHO MEC) for contraceptive use outlines the recommendations for their use in women with different characteristics and medical conditions¹⁶.

World Health Organization Medical Eligibility Criteria (MEC) categories for contraceptive eligibility ¹⁶	
1	A condition for which there is no restriction for 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
4	A condition which represents an unacceptable health risk of the contraceptive method is used

1. Are LARCs suitable for nulliparous women⁶?

Nulliparous women can be offered LARC. The WHO MEC has classified implants as **Category 1** and copper IUD as **Category 2** for nulliparous women with the conclusion that the advantages of using these devices generally outweigh the risks.

Available evidence also suggests that LARC have higher satisfaction and continuation rates in nulliparous women as compared to combined oral contraceptives (COC).

2. When is the appropriate time to insert an IUD/IUS or implant⁶?

An IUD/IUS or implant can be inserted at any time during the menstrual cycle as long as pregnancy can be reasonably excluded. Clinicians have traditionally inserted IUD/IUS during menstruation but no major advantage has been documented for this practice. No backup methods are required for IUD; but for IUS or implant, backup methods of 7 days with condoms need to be used unless they were inserted within 5 days of onset of menstruation, immediately after childbirth or abortion, or immediately upon switching from another hormonal contraceptive.

If there is uncertainty about a woman's menstrual history, a pregnancy test should be performed prior to implant insertion and again no sooner than 3 weeks after the last episode of unprotected sexual intercourse (UPSI).

For the purpose of excluding pregnancy, hormonal, intrauterine and barrier methods can be deemed reliable **provided they have been used** consistently and correctly on every incidence of intercourse.

For the purpose of switching from a combined hormonal method, the implant should ideally, be inserted after the last day of the active pill, ring or patch use. At the latest, the implant can be inserted up to the day following the usual hormone free interval; in this instance, no additional precautions are required. Thereafter, 7 days of additional precautions would be required¹⁷.

3) Timing of repeat insertion

The implant is licensed for a duration of 3 years and should be replaced no later than after 3 years of use¹⁷.

If an implant is replaced immediately, within 3 years since the previous insertion, there is no need for additional contraceptive precautions after replacement¹⁷.

The limited available evidence indicates that the risk of pregnancy during the 4th year of use is likely to be very low.

HCPs (Health care professionals) can advise individuals who present after Unprotected sex during the 4th year of use of an Implant that pregnancy risk is likely to be very low and emergency contraception is unlikely to be required.

However routine use for the Implant more than 3 years is not currently recommended due to available evidence is too limited¹⁸.

4) Postpartum insertion

Fertility returns as early as 3 weeks post-delivery and thus postpartum contraception is an important aspect of prevention of unintended pregnancies.

Generally, IUD and IUS are safe and effective when inserted immediately post delivery within 10 minutes of placental separation¹⁸.

In addition, IUD and IUS can be inserted up to 48 hrs after childbirth and 4 weeks postpartum²⁴.

Implant can be inserted immediately after childbirth regardless of breastfeeding status⁷.

5. Post abortion

Women who have had an abortion are at high risk of repeat unintended pregnancies and thus initiation of contraception at the same time as abortion is critical in reducing that risk.

IUD and implants are suitable to be initiated at the same setting as an abortion or miscarriage. It is a safe and effective practice and is classified as WHO MEC Category 1.

6. Effects of LARC on menstrual patterns and bleeding

LARC have effects on either changing the pattern, amount or duration of bleeding, and proper counseling and reassurance are critical to the initiation and maintenance of these methods.

Unscheduled bleeding in the first 3 months after starting a new hormonal contraceptive method is common. The bleeding pattern in the first 3 months of insertion is broadly predictive of future bleeding patterns for many women. One third of implant users may experience infrequent bleeding, 21% may experience amenorrhoea and approximately 25% may experience prolonged or frequent bleeding. After exclusion of other causes, women who experience troublesome bleeding while using the progestogen-only implant, and who are eligible to use COC may be offered COC cyclically or continuously for 3 months.

7. Pelvic inflammatory disease

The overall risk of pelvic inflammatory disease (PID) following insertion of IUD is low. A large retrospective cohort study found the risk of PID within the first 90 days of insertion was 0.54%¹⁹.

The UK FRS guidance suggests screening women at risk of STIs and offering prophylactic antibiotics to women at high risk of infection if insertion needs to be performed before results of tests are known²⁰.

7a) Past History of Pelvic Inflammatory Disease (PID)²¹.
Both IUD and implant may be offered to women with a past history of PID.

8. Ectopic pregnancy

Use of IUD or implant does not increase the absolute risk of ectopic pregnancy.

IUD or implant may be offered to women with a history of ectopic pregnancy.

The risk of ectopic pregnancy associated with the use of IUD is lower than using no contraception and the overall risk of ectopic pregnancy with the use of IUD is low, approximately 1 in 1000 in five years²².

9. Is routine screening for STIs required before IUD or implant insertion?

Current data do not support routine screening prior to IUD insertion; however, assessment of the risk of STIs is essential. In women deemed to be at high risk of STIs, screening can be instituted and treatment given if the results are positive.

10. Is routine antibiotic prophylaxis needed prior to IUD insertion?

Current recommendations do not support routine antibiotic prophylaxis and studies have shown such practices do not decrease the risk of pelvic infection post-insertion nor reduce the likelihood of IUD removal in the first 3 months post-insertion.

11. What are the non-contraceptive benefits of implant?

Dysmenorrhoea and ovulatory pain that are not associated with any identifiable pathological cause may be alleviated by the implant⁷.

12. What are the non-contraceptive benefits of levonogestrel intrauterine system (IUS)²⁰

A) Menorrhagia

Most notable benefit is reducing heavy menstrual blood loss and improving quality of life and is more effective than oral treatment such as progestogens, combined contraceptive pills or tranexamic acid. It also appears to be comparable in effectiveness to endometrial ablation and is more cost effective than both endometrial ablation and hysterectomy at 2 years.

B) Dysmenorrhoea

It can also be used to treat primary dysmenorrhoea and dysmenorrhoea associated with endometriosis and adenomyosis.

C) Endometrial protection

It affords endometrial protection against the unopposed effects of oestrogen therapy as part of hormone replacement therapy.

Family Planning: Local Perspectives

Family planning and contraception is an important form of preventive medicine for women's health. The practice of family planning has been significantly influenced by many other factors such as sociocultural and religious perspectives.

Muslims are guided through sound Islamic principles in planning the size of their families and/or deciding on the spacing of their children.

Official Fatwa of the Malaysian National Council for Islamic Affairs (1981)

Contraception to limit the number of offspring is *haram* (forbidden) unless under *harus* (permissible) individual circumstances. Contraception that is not permanent in nature is permissible when the following conditions set by the *Shariah* are met:

- the wife is too weak or ill
- the couple carries a hereditary illness
- the wife has poorly spaced pregnancies

To space pregnancies for reasons of health (of the parents and children), education (eg. educational facilities) and family happiness (housing, leisure etc.) is *harus* (permissible).

Managing irregular bleeding among Muslim women users

- It is a well-known fact that irregular vaginal bleeding is the major reason for discontinuation of progestogen only contraceptives. (POC)
- Muslim women are particularly concerned about the irregular vaginal bleeding which could interfere with their daily prayers, fasting and other religious rituals. It is important to counsel them regarding the source of the irregular vaginal bleeding in POC users – which is not the same as in menstruation. It therefore should be regarded as an intermenstrual bleed. Such bleeding is not regarded as menses and the woman should be able to continue with her daily religious rituals.

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