

[Training course in sexual and reproductive health research - 2011](#)
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[How to use WHO's family planning guidelines and tools - Mary Eluned Gaffield](#)

How to use family planning guidelines and tools

To successfully complete this portion of the family planning module, students should do the following:

- View the online presentation covering WHO's four cornerstones of family planning guidance.

- Review the following materials which can be viewed and/or downloaded from the WHO website: 1) Medical eligibility criteria for contraceptive use; 2) Selected practice recommendations for contraceptive use; 3) Decision-making tool for family planning providers and their clients; 4) Family Planning: A global handbook for providers. These are available at the following website location: http://www.who.int/reproductivehealth/topics/family_planning/en/index.html

- Complete one of the following assignments:
 - Select and complete three case studies. Answer the questions that accompany each scenario and justify your rationale.

 - Conduct a literature search to identify the three most important medical conditions in your country that health care providers offering family planning services encounter. Support why they are important, how you identified your supporting data, and explain why they may or may not present challenges to family planning providers in your country.

Case study #1

Your patient is a 30-year-old G2P2 and is a non-smoker. Her second pregnancy was complicated by a deep venous thrombosis. She plans another pregnancy in the future. Her blood pressure is normal. Her health is good, however she is obese (weight is 82 kilograms). She currently uses condoms, but would like something more effective.

Question: According to the WHO Medical Eligibility Criteria, which methods are safest for this patient?

Question: Which methods should not be recommended for this patient, and why?

Answers:

According to the WHO Medical Eligibility Criteria, which methods are safest for this patient?

- Category 1: copper IUD, Barrier methods
- Category 2: progestin-only pills, DMPA/NET-EN injections, Implants, LNG-IUD

Which methods should not be recommended for this patient, and why?

- Category 4: combined oral contraceptives, combined injectable contraceptives, patch, ring (because estrogen further increases her already increased risk for repeat DVT)
- Female sterilization (because the patient plans another pregnancy in the future)
- Fertility-awareness-based methods (because they are not more effective than condoms)

Discussion:

There are two important medical conditions to recognize in this case. First, the patient is obese (BMI > 30 kg/m²). Second, the patient has a history of a prior DVT during pregnancy. If the patient had been obese, but without a history of a prior DVT, then all methods of contraception would have been appropriate for her. In that case, POPs, DMPA/NET-EN injections, implants, and the Copper-IUD and the LNG-IUD are all considered Category 1 (WHO MEC p. 110). The combined hormonal contraceptives (COC, CIC, patch, and ring) are all considered Category 2. Combined hormonal contraceptives are listed as Category 2 because obese women are more likely to experience DVTs, and estrogen-containing contraception may also increase a woman's risk of DVT. If an obese woman has not already had a DVT, she can still use a combined hormonal contraceptive if she is unwilling or unable to use the progesterone-only contraceptives or the copper IUD. It should also be noted that obese women are no more likely to gain weight after three cycles of the vaginal ring or COCs than overweight or normal weight women. (WHO MEC p. 18). The effectiveness of combined hormonal contraceptives may decrease with increased weight, but they are still more effective than barrier methods. COCs with ethinyl estradiol (EE) doses of >35 ug should not be

used for contraception in obese women because this could further increase their risk of DVT.

If a woman has had a prior DVT, she is no longer a candidate for combined hormonal contraception (WHO Category 4), whether or not she is obese. This is true even if the woman is on anticoagulant therapy (WHO MEC p. 111). If a woman has a history of a DVT or pulmonary embolism, a non-hormonal method, such as the Copper-IUD, would be the first choice (WHO Category 1). Barrier methods are also considered Category 1 (WHO MEC p. 82), but their higher failure rates may put patients at higher risk of pregnancy, which leads to an even higher risk of repeat DVT. An alternative would be to consider progesterone-only contraceptives, which are all WHO Category 2. Sterilization is an acceptable option (WHO MEC p. 99) if the patient is sure that she does not want to have any future pregnancies.

Case study #2

Your patient is a married 45-year-old G4P4 who is having early symptoms of menopause. She has systemic lupus erythematosus (antiphospholipid antibody negative) and was recently hospitalized for menometrorrhagia. She was discovered to have severe thrombocytopenia during that admission and was started on immunosuppressive treatment. She does not desire anymore children and would like to start a new birth control method. She had previously been using the Standard Days method for birth control.

Question: According to the WHO Medical Eligibility Criteria, which methods are safest for this patient right now?

Question: Which methods should not be recommended for this patient, and why?

Answers:

According to the WHO Medical Eligibility Criteria, which methods are safest for this patient right now?

- Category 1: barrier methods (condoms, spermicide, diaphragm), male sterilization
- Category 2: COC, CIC, patch/ring, progestin-only pills, implants, LNG-IUD

Which methods should not be recommended for this patient, and why?

- Category 3: DMPA (because of potentially heavy and irregular bleeding with initiation), Copper IUD (because it may increase menorrhagia during the first few months)
- Special: female sterilization (because her severe thrombocytopenia could lead to surgical bleeding complications)
- Delay: fertility awareness-based methods (because she is having irregular bleeding and cannot accurately monitor her menstrual cycle)

Discussion:

The important medical conditions to recognize in this patient are that the patient is peri-menopausal and has both lupus and heavy/irregular vaginal bleeding. When encountering a patient with lupus, you must first answer the following three questions: 1) What is her antiphospholipid antibody status?, 2) Does she have severe thrombocytopenia?, and 3) Is she on immunosuppressive treatment? In the case of this patient, she is not positive for antiphospholipid antibodies, but she does have severe thrombocytopenia and is taking immunosuppressive treatment. If she had been antiphospholipid antibody positive, her options would be more limited because she would be at higher risk for both arterial and venous thrombosis and therefore would not be a candidate for combined hormonal contraceptives (WHO Category 4; WHO MEC p. 20). In that case, progesterone-only contraceptives or the LNG-IUD would be the best options (WHO Category 3; WHO MEC p. 111), if her partner was unwilling to comply with barrier methods or male sterilization. Special note should be made that it is Category 3 to initiate DMPA or NET-EN if a woman has severe thrombocytopenia because women may have heavier or irregular bleeding after the first injection, which is irreversible for the first 11-13 weeks. However, if she is already on DMPA or NET-EN, it is Category 2 to continue it. A copper IUD would be another option; although it would be considered Category 3 to initiate it because it also could worsen her bleeding during the first few months. However, once her severe thrombocytopenia had resolved, it would be Category 2 to place it. Peri-menopause is not a contraindication for any hormonal or intrauterine contraceptive method, unless she has risk factors (besides age > 35 years) that put her at increased risk for cardiovascular disease or venous thromboembolism. In that case, she should avoid using estrogen-containing contraceptives and as they can increase the risk of both. Otherwise, hormonal and intrauterine contraceptives may be safely used until the patient enters menopause. Fertility-awareness-based methods are not appropriate to use in the peri-menopausal patient since she will likely have irregular periods.

Case study #3

Your patient is a 17 year old G0. She presents for emergency contraception after having had unprotected intercourse two days ago. She has had two partners in the last year. She stopped taking her combined oral contraceptive pills six months ago because she had irregular bleeding from occasionally missing her pills. Since then she has used withdrawal. Although she does eventually hope to have children, she is not interested in getting pregnant for at least 4 years because she hopes to start university this fall.

Question: According to the WHO Medical Eligibility Criteria, which methods are safest for this patient right now?

Question: Which methods should not be recommended for this patient, and why?

Answers:

According to the WHO Medical Eligibility Criteria, which methods are safest for this patient right now?

All contraceptive methods except for sterilization could be recommended for this patient.

- Category 1: barrier methods, COC, CIC, patch/ring, progesterone-only pills, implants
- Category 2: DMPA/NET-EN, copper IUD, LNG-IUD

Which methods should not be recommended for this patient, and why?

Only sterilization should not be recommended since she has expressed interest in future fertility.

Discussion:

The important medical conditions to recognize in this case are that the patient is an adolescent and is nulliparous. She can receive emergency contraception, including both emergency contraception pills and the copper IUD, because she is within 120 hours of unprotected intercourse. As an adolescent, she is at higher risk for sexually transmitted infections, such as gonorrhea and chlamydia. Therefore, she should also be counseled on safe sexual practices, including use of condoms, and offered sexually transmitted infection testing. Given that the patient knows that she does not want to become pregnant for at least 3 years and forgets to consistently use contraception, it would be cost-effective and easiest for the patient to use a “forgettable” and long-acting reversible contraceptive method, such as the contraceptive implant or either the copper or levonorgestrel IUD. It is safe to place IUDs in women who are both adolescents and nulliparous, and well-conducted studies have shown that there is no increased risk of infertility with either of the modern IUDs (WHO MEC p. 65). However, IUD insertion can be more technically difficult in nulliparous and adolescent patients due to the small size of the cervix. Cervical dilators may be needed, and a paracervical block or pre-procedure administration with NSAIDs may reduce discomfort during insertion. DMPA/NET-EN is also safe for use in adolescents. Most studies have found that women (including adolescents) lose bone mineral density while using DMPA, but regain bone mineral density after discontinuing DMPA (WHO MEC p. 45). Although combined oral contraceptives and progestin-only pills are considered Category 1 for this patient, since she has had problems remembering to take pills on a daily basis, it would not be the best choice for this patient. Fertility-awareness-based methods also may not be ideal for the same reason.

Case study #4

Your patient is a 26 year old G4P3 with a history of epilepsy who just delivered her third baby less than 48 hours ago. Her seizure disorder is well-controlled with phenytoin. She is breastfeeding and wondering which contraceptive she should start in the postpartum period. She is not sure if she wants to have any more children.

Question: According to the WHO Medical Eligibility Criteria, which methods are safest for this patient right now?

Question: Which methods should not be recommended for this patient, and why?

Answers:

According to the WHO Medical Eligibility Criteria, which methods are safest for this patient right now?

- Lactational amenorrhoea (not categorized)
- Condoms or spermicide (cannot use diaphragm or cervical cap until uterine involution is complete)
- Category 1: copper IUD
- Category 3: progestin-only pills, DMPA/NET-EN implants, LNG-IUD

Which methods should not be recommended for this patient, and why?

- Category 4: COC, CIC, P/R (because of potential risk for venous thromboembolic disease in the postpartum period, potential risk for decreased milk volume with estrogen use, and theoretical risk of neonatal exposure to steroid hormones)
- Female sterilization (because she is not sure if she wants to have more children)
- Delay: fertility awareness-based methods (because may have irregular bleeding and cannot accurately monitor her menstrual cycle)

Discussion:

The important medical conditions to recognize in this case are that the patient is less than 48 hours postpartum, breastfeeding, and with a history of epilepsy requiring use of phenytoin. It is Category 1 to place the Copper IUD within 48 hours after delivery of the placenta. After 48 hours, it becomes Category 3 to place the Copper IUD because of potentially higher expulsion rates during uterine involution. Progestin-only contraceptives are all considered Category 3 in breastfeeding women because of a theoretical risk of neonate exposure to steroid hormones during the first 6 weeks postpartum. However, direct evidence from clinical studies demonstrates no effect of POCs on breastfeeding performance and generally demonstrates no harmful effects from exposure through breast milk in infants less than 6 weeks of age. Therefore, some countries (such as the United States) have modified their country-specific Medical Eligibility Criteria so that POCs are Category 2 during the first 6 weeks postpartum. The WHO also acknowledges in their MEC 2009 that in setting where pregnancy morbidity and mortality risks are high, and access to services is limited, POCs may be one of the few types of methods widely available to breastfeeding women immediately postpartum. In fact, for a patient who is taking phenytoin, DMPA is considered to be Category 1 because its effectiveness is not decreased by use of phenytoin, unlike other methods such as POPs, NET-EN and implants. The Copper IUD and LNG-IUD are also considered Category 1 for patients taking certain anticonvulsants. For a list of anticonvulsants that can decrease the effectiveness of hormonal contraception, see p.

115 of the WHO MEC. If a patient opts for a method where its effectiveness might be decreased by anticonvulsant use, the patient should be encouraged to use dual methods for contraception. In this case, the patient could use either condoms or spermicide as a second method or as the primary method if she can remember to use them every time. Lactational amenorrhoea could also be used as a second method or as the primary method if meets the following three criteria: 1) amenorrhoea, 2) fully or nearly fully breastfeeding, 3) less than six months postpartum.

Case study #5

Your patient is a 25 year old G3P3 who has been diagnosed with pelvic inflammatory disease (PID), thought to be secondary to chlamydia (lab tests are still pending). She has received an injection of ceftriaxone and is starting a 14-day course of doxycycline. She has a copper IUD in place, which was placed 2 years ago and which she would like to continue to use for contraception.

Question: According to the WHO Medical Eligibility Criteria, is it safe for the patient to continue using the copper IUD in the setting of a diagnosis of PID?

Question: According to the WHO Medical Eligibility Criteria, is it safe for the patient to initiate use of an IUD in the setting of a current diagnosis of PID?

Answers:

According to the WHO Medical Eligibility Criteria, is it safe for the patient to continue using the copper IUD in the setting of a diagnosis of PID?

- Yes, it is considered Category 2 to continue using an IUC during an episode of PID.

According to the WHO Medical Eligibility Criteria, is it safe for the patient to initiate use of an IUD in the setting of a current diagnosis of PID?

- No, it is considered Category 4 to initiate IUD during a current diagnosis of PID.

Discussion:

The important medical condition to recognize here is that the patient has had the IUD in place for 2 years and now has been given a new diagnosis of PID. Large WHO trials that included over 22,000 IUD and over 51,000 woman-years of follow-up have shown that IUD does not increase a patient's risk of PID, except during the first 20 days after insertion.ⁱ Therefore, a patient with a current diagnosis of PID, purulent cervicitis, or gonococcal or chlamydial infection should not have an IUD placed since that would further increase their risk of PID. However, if a patient already has an IUD in place, it is safe to continue its use while the PID or gonococcal/chlamydial infection is being treated. The presence of the IUD should not prevent the patient from having her infection successfully.

ⁱ Farley TM, Rosenberg MJ, Rowe PJ, Chen JH, Meirik O. Intrauterine devices and pelvic inflammatory disease: an international perspective. *Lancet* 1992;339(8796):785-8.

Case study #6

A 30 year old G5P5 with menorrhagia presents for evaluation. She is interested in using the LNG-IUD because her friend has been using it for birth control and found that her periods became much lighter after starting the IUD. Your patient wonders if she could also have the LNG-IUD placed for both contraception and treatment of her menorrhagia. You perform a pelvic ultrasound and note that your patient has a 3 cm submucosal fibroid at the fundus that is distorting her uterine cavity.

Question: According to the WHO Medical Eligibility Criteria, is it safe for the patient to have an IUD placed if she has fibroids that distort her uterine cavity?

Question: According to the WHO Medical Eligibility Criteria, are other hormonal methods of contraception safe if a patient has fibroids that distort her uterine cavity?

Answers:

According to the WHO Medical Eligibility Criteria, is it safe for the patient to have an IUD placed if she has fibroids that distort her uterine cavity?

- No, it is considered Category 4 to have an IUD placed in the setting of fibroids that distort the uterine cavity because the risk of an unsuccessful IUD insertion and subsequent IUD expulsion are high.

According to the WHO Medical Eligibility Criteria, are other hormonal methods of contraception safe if a patient has fibroids that distort her uterine cavity?

- Yes, it is considered Category 1 to use combined hormonal contraceptives or progestin-only contraceptives if a patient has fibroids that distort her uterine cavity. The only exception is the LNG-IUD, for the reasons listed above.

Discussion:

The important medical condition to recognize here is that the patient has uterine fibroids that distort her uterine cavity. Therefore, it would be unsafe to place an IUD in this setting, since it is likely that the IUD will not be placed in the proper position and be less effective. In addition, the rates of IUD expulsion are higher in such a setting. However, other hormonal therapy would be safe to use and could also improve the woman's menorrhagia from her fibroid. If the patient's menorrhagia does not improve with hormonal management, she will likely need surgical treatment with a hysteroscopic myomectomy or a hysterectomy.