Postpartum Contraception

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Presentation Outline

- Define postpartum contraception
- Briefly describe physiology of the postpartum period and its effects on contraception
- Discuss postpartum return of fertility, timing and initiation of method types, and use of key contraceptive methods
- Review WHO medical eligibility criteria for contraceptive use
- Make substantive recommendations with relevance for the African region

Definitions

Postpartum Contraception: the initiation and use of FP methods within the first year after delivery

4 types:

Post-placental: within 10 minutes after delivery of the placenta

Immediate Post-partum: within 48 hours after delivery

Early postpartum: 48 hours up to 6 weeks

Extended postpartum: 48 hours up to one year after birth

Post-partum contraception: General Considerations

- Goals in choice of postpartum contraception are:
- To limit family size and promote adequate birth spacing; and
- To support successful breastfeeding.
- Most women begin intercourse within 1-2 months after delivery:

- 60-70% are sexually active by 6 weeks after delivery
- Only 4% are abstinent at the end of the 12th week post-delivery

Basic Pregnancy Breast Physiology

- During pregnancy, breasts are developed for eventual milk production
- E: growth of breast ducts; P: alveoli growth
- Prol, insulin, cortisol, T4, HGH also necessary
- Prevention of milk production and release:
- E+P prevent milk production in pregnancy
- After birth, E+P decline; milk production starts
- Sucking releases oxytocin, which causes milk ejection from the myo-epithelial cells
- Continued suckling releases more prolactin, which inhibits GnRH and prevent ovulation

Ovulation Patterns in Non-lactating women

- Normal FSH, LH in 3-5 weeks
- Ovulation in 6-7 weeks (median=45 days)
- Half of women not fully breastfeeding will ovulate before the 6^{th} post-partum week.
- However, most early postpartum bleeds are anovulatory or have luteal phase insufficiency.

Ovulation Patterns in Lactating women

- Resumption of ovulation depends on:
  - Intensity, frequency, duration of suckling
  - Time elapsed since delivery
  - Maternal nutritional state
  - Rate of weaning: rapid> gradual weaning
  - Time of introduction of supplementary feeding
- Some nursing mother will ovulate before their first post-partum menses

Lactational Amenorrhea Method (LAM)

- Traditional method of contraception which relies on the physiological amenorrhea produced by breastfeeding
- If effectively done, pregnancy rate is 1-2% by 6 mos., postpartum
- 7% preg rate by 12 mos., and 13% by 24 mos.
- To enhance its effectiveness, exclusive BF is recommended (WHO, Bellagio, 1989)

LAM: Summary

- LAM works well but the return of fertility is multifactorial and can be unpredictable
- It is less effective from 10 wks. to 6 months, since ovulation may precede bleeding after 10 weeks
- LAM is very unreliable when used incorrectly
- Thus, another method should be used after 6 months, or sooner if menstrual bleeding occurs.

Other Possible Effects of Pregnancy on Contraception

- Hypercoagulable state of the post-partum period which might be accentuated by hormonal contraceptives and increase the risks of venous thromboembolism (VTE)
- Potential effects of hormonal contraceptives on quality of breast-feeding
- Other maternal health risks – BP, lipids, endometritis

Post-partum contraceptive methods

Non-hormonal methods	Hormonal methods
• **LAM** • **Barrier Methods** • **Periodic Abstinence** • **Male and Female Sterilisation** • **IUDs (Copper)**	• Progestin-only Contraceptives - Implants - Injectables - Progestin-only pills (POPs) • Combined E-P Methods - Combined oral contraceptives (COCs) - Monthly injectables

Medical Eligibility Criteria for contraceptive use (MEC) – WHO

- Covers 17 contraceptive methods, 120 diseases
- To guide FP practices based on available evidence
- Addresses who can use & not use contraceptives
- To improve quality, access and safety of FP

Sources of Information

- ❑ WHO Medical Eligibility Criteria for Contraceptive Use – 4th edition – 2010
- www.who.int/reproductive-health/publications/mec/
- www.reproductiveaccess.org/contraceptiion/WHO_chart.htm
- ❑ WHO selective Recommendations for Contraceptive Use 2008
- http://www.who.int/reproductive-health/publications/spr/index.htm

WHO Medical Eligibility Criteria

WHO Category	Definition	Recommendation
1	No restriction in use	Use the Method
2	Advantages outweigh risks	More follow-up Needed
3	Risks outweigh advantages	Clinical judgement on safe use needed
4	The condition is an unacceptable health risk if method is used	Do not use the method.

WHO MEC: Non-breastfeeding women

	OC	P/R	POP	DMPA	Implant	Cu-IUD	LN-IUD
<48 hrs.	3	3	1	1	1	2	3
2-21 days	3	3	1	1	1	3	3
3-4 weeks	1	1	1	1	1	3	3
>4 weeks	1	1	1	1	1	1	1

WHO MEC: Breastfeeding women

	OC	P/R	POP	DMPA	Implant	Cu-IUD	LN-IUD
< 6 weeks			3	3	3	2	3
6 weeks – 6 mos.	3	3	1	1	1	1	1
>6 months	2	2	1	1	1	1	1

Summary: when to introduce methods in BF women

Timing	LAM	OC	POP	IUD	BTL	Condoms
At Delivery	OK	NO	NO	OK	OK	NO
3 Weeks	OK	NO	NO	NO	NO	OK
6 Weeks	OK	OK	OK	OK	OK	OK
6 Months	OK	OK	OK	OK	OK	OK
>6 Months	NA	OK	OK	OK	OK	OK

Effect of postpartum OCs on Lactation

- No change in milk composition due to OCs
- If started before the onset of lactation, high does estrogen decreases the quantity of milk
- If low dose Ocs started after lactation is established, minimal effect on milk quantity
- POCs have no effect on either the quantity or composition of milk
- Women who use Ocs have a lower incidence of BF after the 6^{th} PP month (3.7mos. Vs. 4.6mos in controls)

Post-partum OCs and Newborn Risks

- Only 1% of ingested drug ingested in milk
- E2 reaching newborn is equivalent to amount of natural E2 reaching the newborn when nor on Ocs.
- No short or long term adverse effects on the newborn and infant
- Newborn growth rate not affecred by OCs

Post-partum Ocs and Maternal Risks

- Changes in maternal clotting factors persist for 4 weeks after term delivery;
- Pregnancy hypercoagulability + Ocs may increase risk of VTE – increased up to 4 wks PP
- This increased risk applies only to combination Ocs, and not in POPs
- Not studied in healthy, ambulatory low-does OC users vs. controls.

Post-partum Ocs: Clinical Guidelines

- Ambulating, non-nursing women, No DVT risks: COCs starting 3-4 weeks PP
- Nursing women:
- Conservative: Avoid COCs: Ok to use POPs
- Switch to COCs at 3 mos. or when BF completed
- Liberal: COCs once lactation is established (≥3-4 wks.)
- If combination pills used, use 20 mcg estrogen dose – e.g. LoEstrin, 1/20)

Post-partum Long-acting Progestins

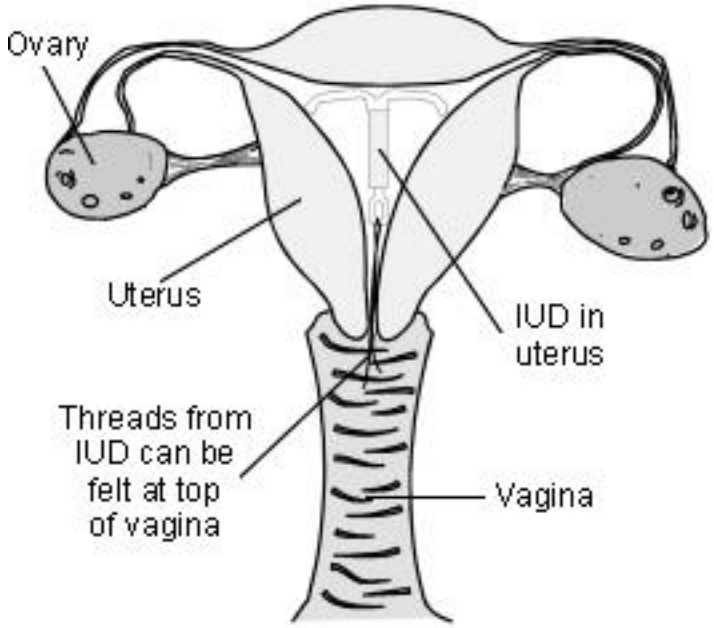
- DMPA
- Mildly lactogenic, with no change in milk composition
- Implants (Implanon, norplant studies)
- If inserted > 4-6 wks. Pp., no effects on milk volume, content, or newborn growth rates
- Administration before hospital discharge
- Advantage: protection if no return for postnatal visit
- Disadvantage: Unnecessary for first 4 weeks, and may be difficult to differentiate anatomic bleeding from method side effect of bleeding.

WHO MEC: Postpartum IUD Insertion

	Cu-IUD	LNG-IUD	Comment
< 48 hrs.	2	3	Evidence of increased
48 hrs. – 4 wks.	3	3	Expulsion rates w/immediate
>4 weeks	1	1	Vs. delayed PP
Endometritis	4	4	/interval insertion

Post-partum IUD Insertion: Clinical Procedure

- Guidelines are identical in lactating and non-lactating women
- Insert IUD within 15 minutes of removal of the placenta
- Use sponge forceps on cervical lip, 2nd forceps to insert
- Cut string flush with external cervical os.



Post-Abortion IUD Insertion

- Rationale: Many women scheduled for IUD insertion after induced abortion to return for the procedure
- No difference in complications for immediate vs. delayed IUD after safely induced abortion
- Expulsion more likely when an IUD was inserted after a 2nd trimester vs. 1st trimester abortion
- No differences in safety or expulsions for post-abortion of a CU-IUD vs. LNG-IUD|
- Limited data from countries where abortion is legally restrictive and abortion unsafe

Post-partum Barrier Methods

- Most widely used method by lactating women
- Should be avoid in women experiencing heavy bleeding post-partum
- Lubricated condoms – good in reduced vaginal lubrication and protect against STIs and HIV
- Diaphragm, cervical cap should be fitted > 6weeks postpartum to permit return of normal anatomy.

Post-partum Contraception in sub-Saharan Africa

- Data is limited. Evidence suggests that although up to 80% of women in the immediate post-partum period, indicate an intention to delay the next childbirth in SSA countries, less than 20% of women actually use contraceptives in the following 12 mos.

- Factors responsible for low use of PPC in SSA include: preference for high fertility, low rate of hospital births, and poor integration of PPC into maternal health care delivery systems.

Post-partum Contraception: Considerations for SSA

- LAM, very crucial: Encourage breastfeeding for all post-partum women
- Do not discontinue BF to begin use of a contraceptive method
- Applying the “rule of 3s” in counselling:

- Counsel for FP at 3 wks. postnatal visit
- If no or partial BF, initiate contraception at 3rd PP week
- If BF, initiate contraception at 3rd PP month

Conclusions

- Post-partum contraception provides a window of opportunity for women to space child-birth in order to improve maternal and neonatal health
- There is limited research on use of this method in many developing countries, especially SSA
- Obstetricians working in these regions are enjoined to implement future research and programs to increase the use of PPC for the promotion of women's health

To save lives, mothers should be encouraged to wait until their baby is 2 years before they try another pregnancy

THANK YOU