HORMONAL CONTRACEPTION METHODS

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Objective

- To discuss hormonal methods of contraception

Hormonal contraception methods

At the end of the curse the participants should be able to:

- Enumerate the different methods of hormonal contraception
- Discuss the way they act
- Give the criteria of eligibility
- Know how to deliver those methods

Plan

- Different methods of hormonal contraception
- Mode of action
- Criteria of eligibility of every method
- Contra-indication
- Conclusion

Hormonal contraception methods

Mode of action

- Stop ovulation
- Thicken cervical mucus
- Do not work by disrupting pregnancy

Different types of hormonal contraception

- Low dose combined oral contraceptives
- Progestin – only methods
  - Progestin-only oral contraceptives
  - DMPA and NET EN injectables
  - Norplant implants

COCs - Key points (1)

- Effective, reversible method
- Should be taken every day to be most effective
- Side effects :
  - irregular vaginal bleeding
  - missed periods
- Not dangerous but cause discomfort for some women
- Safe for almost all women. Serious side effects are very rare

COCs - Key points (2)

- Can be used by women of any age
- Can be started any time it is reasonably certain a woman is not pregnant
- Protect against certain cancers, anemia, and other conditions
- Not recommended for breastfeeding women.
- Can be used for emergency contraception

COCs - Presentation

2 types of pills packets

- 28 pills: 21 “active pills” + 7 remember pills without hormones
- 21 active pills

COCs - Effectiveness

- 6-8 pregnancies/100 women in first year of use
- when used correctly 0.1 pregnancy/100 women (1/1000)

COCs – Advantages (1)

- Very effective when used correctly
- No need to do anything at time of sexual intercourse
- Increased sexual enjoyment
- Monthly periods are regular
- Lighter monthly bleeding
- Fewer days of bleeding
- Milder and fewer menstrual cramps

COCs – Advantages (2)

- Can be used as long as a woman wants to prevent pregnnacy. No rest period needed
- Can be used at any age from adolescence to menopause
- Can be used by women who have children and by women who do not
- User can stop taking pills at any time
- Fertility returns soon after stopping

COCs – Advantages (3)

- Can be used as an emergency contraceptive after unprotected sex
- Can prevent or decrease iron deficiency anemia
- Help prevent:

Ectopic pregnancies

Endometrial cancer

Pelvic inflammatory disease

Ovarian cysts

Benign breast disease

Ovarian cancer

COCs – Disadvantages (1)

Common side effects

- Nausea
- Bleeding between menstrual periods
- Mild headaches
- Breast tenderness
- Slight weight gain
- Amenorrhea

COCs – Disadvantages (2)

- Not highly effective unless taken every day. Difficult for some women to remember every day
- New packet of pills must be at hand every 28 days
- Not recommended for breastfeeding women
- May cause mood changes including depression, less interest in sex. Very rarely can cause stroke, blood clots in deep veins of the legs, or hearts attack.
- Do not protect against STDs/AIDS

COCs – Eligibility (1)

Situations to attest before eligibility

- Cigarettes smoking with age > 35
- Hypertension
- Breast feeding (baby < 6months)
- Cardiopathy and blood vessels problems
- Breast cancer
- Jaundice and liver problem

COCs – Eligibility (2)

Situations to attest before eligibility

- Bad headache and blurred vision
- Intaking of some drugs for seizures, Rifampicine and Griseofulvine
- Pregnancy

Wo can use COCs (1)

Most women

- Have no children
- Fat or thin
- Any age including Adolescents and over 40
- Unusual vaginal bleeding
- Smoke cigarettes but are under age 35
- Have just had abortion or miscarriage
- Heavy, painful menstrual periods or iron deficiency anemia (condition may improve)

Who can use COCs (2)

- Irregular menstrual periods
- Benign breast disease
- Diabetes without vascular complications
- Mild headaches
- Varicose veins
- Malaria
- Schistosomiasis
- Thyroid disease
- Pelvic inflammatory disease
- Endometriosis
- Benign ovarian tumors
- Uterine fibroids
- Past ectopic pregnancy
- Tuberculosis (unless taking rifampin)

When to start COCs? (1)

- Having menstrual cycles
- The first day of menstrual bleeding is best
- Any of the first 7 days of cycle
- Any other time if it is reasonably certain that she is not pregnant;
- 6 months after childbirth if breastfeeding

When to start COCs? (2)

After childbirth if not breastfeeding

- 3 to 6 weeks after childbirth
- After 6 weeks, any time it is reasonably certain that she is not pregnant

When to start COCs? (3)

After miscarriage or abortion

- In the first 7 days after first – or second – trimester miscarriage or abortion
- Later, any time it is reasonably certain that she os not pregnant

When stopping another method

- Immediately. No need to wait for a first period after using injectables.

Missed pills (1)

Missed 1 (white) hormonal pill

- Take the missed pill at once
- Take the next pill at the regular time. This may mean taking 2 pills on the same day or even 2 at the same time
- Take the rest of the pills as usual, once each day

Missed pills (2)

Missed 2 or more (white) hormonal pills in any 7 days ?

- For 7 days use condoms, spermicide or avoid sex
- Take a (white) hormonal pill at once
- Count how many (white) hormonal pills are left in the packet

Missed pills (3)

- Take all the rest of the pills as usual, once each day
- Fewer than 7 (white) hormonal pills left?
- Take the rest of the (white) hormonal pills as usual
- Start a new pack on the next day after the last (white) hormonal pill

Missed pills (4)

- Missed one or more of any (brown) reminder pills?
- Throw the missed pills away
- Take the rest of the pills as usual, one each day
- Start a new packet as usual on the next day

Symptoms of problem that require medical attention

- Severe constant pain in abdomen, chest, or legs
- Bad headaches that start or become worse after she begins to take COCs
- Brief loss of vision, seeing flashing lights or zigzag lines
- Jaundice

COCs - Side effects

- Nausea
- Minor headaches
- Amenorrhea
- Spotting or bleeding
- Unexplained abnormal vaginal bleeding

Emergency oral contraception

Definition

- Postcoital or morning after contraception used up to 72 hours after unprotected sex to mainly stops ovulation
- Does not disrupt existing pregnancy

Emergency oral contraception

Effectiveness

- Prevents ¾ pregnancies that would otherwise have occured
- Do not prevent STDs

Emergency oral contraception How to take it ?

Formulation	Number of pills to swallow within 72 hours	Number of pills to swallow 12 hours later
Progestin-only oral contraceptives containing 0.075 mg desogestrel	20	20
Progestin-only oral contraceptives containing 0.03 mg levonorgestrel	25	25
Low-dose COCs containing 0.15 or 0.25 mg levonorgestrel or 0.5 mg norgestrel plus 0.03 mg ethinylestradiol	4	4
“Standard dose” COCs containing 0.125 or 0.25 mg levonorgestrel plus 0.05 mg ethinylestradiol	2	2
Levonorgestrel 0.75 mg (postinor-2)	1	1

Emergency oral contraception Side effects

- Nausea
- Vomiting
- Next montly period may start few days earlier or later than expected

Progestin-only oral contraceptives (POCs)

POCs or mini pills

- Best contraception for breastfeeding women

POCs - Effectiveness

- For breastfeeding women: very effective as commonly use, 1 pregnancy/100 women
- For all women very effective when used commonly and consistently, 0.5 pregnancies/100 women (1/200)

POCs - Advantages

- Can be used by nursing mothers starting 6 weeks after childbirth
- No estrogen side effects
- One pill every day
- Effective during breastfeeding
- Less risk of progestin relates side effects
- May help prevent: Benign breast disease; Endometrial and ovarian cancer

POCs - Disadvantages

- Changes in menstrual bleeding
- Headaches
- Breast tenderness
- Should be taken at about the same time each day
- Do not prevent ectopic pregnancy

POCs - Situations to assess before eligibility

- Breast cancer
- Jaundice and liver problem
- Breastfeeding less than 6 weeks
- Unusual vaginal bleeding
- Intake of drugs for seizures, Rifampicin or Griseofulvin
- pregnancy

Who can use POCs? (1)

- Most women can use progestin-only oral contraceptives
- Breastfeeding
- Smoke cigarettes
- Benign breast disease
- Headaches
- High blood pressure
- Blood clotting problems
- Iron deficiency anemia

Who can use POCs? (2)

- Varicose veins
- Valvular heart disease
- Have no children
- Any age, including adolescents and over 40
- Are fat or thin
- Have just had abortion or miscarriage

Who can use POCs? (3)

- Malaria
- Sickle cell disease
- Schistosomiasis
- Pelvic inflammatory disease
- Sexually transmitted diseases
- Gallbladder disease
- Heavy, painful menstrual periods
- Irregular menstrual periods
- Endometriosis
- Thyroid
- Benign ovarian tumors
- Uterine fibroids
- Epilepsy
- Tuberculosis

When to start POCs? (1)

Breastfeeding

- As early as 6 weeks after childbirth
- If menstrual periods have returned any time if it is reasonably certain that she is not pregnant

If not breastfeeding

- Immediately or at any time in the first 4 weeks after childbirth
- After 4 weeks, any time if it is reasonably certain that she is not pregnant

When to start POCs (2)

After miscarriage or abortion

- Immediately or in the first 7 days after either first or second-trimester miscarriage or abortion
- Any time it is reasonably certain that she is not pregnant
- In the first 5 days of menstrual bleeding; the first day of menstrual bleeding is best; no backup method is needed for extra protection

When stopping another method

- Immediately

Injectable contraceptive

- DMPA (depot – medroxy – progesterone – acetate)
- NET EN (norethindrone enanthate)

Injectable contraceptive Advantages (1)

- Very effective
- Private
- Long-term pregnancy prevention but reversible
- Increased sexual enjoyment
- No daily pill-taking
- Allows some flexibility in return visits
- Can be used at any age
- Quantity and quality of breast milk do not seem harmed
- No estrogen side effects

Injectable contraceptive Advantages (2)

- Prevent ectopic pregnancies
- Prevent endometrial cancer
- Prevent uterine fibroids
- Prevent ovarian cancer
- May help prevent iron-deficiency anemia
- May make seizure less frequent in women with epilepsy
- Makes sickle cell crises less frequent and less painful

Injectable contraceptive Disadvantages/Side effects

- Changes in menstrual bleeding are likely, including:
  - Light spotting or bleeding.
  - Heavy bleeding
  - Rare amenorrhea. Normal, especially after first year of use
- May cause weight gain
- Delayed return of fertility
- Requires another injection every 3 months
- Does not protect against STDs
- May cause headaches, breast tenderness, moodiness, nausea, hair loss, less sex drive, and/or acne in some women

Injectable contraceptive When to start (1)

- Having menstrual cycles
- If starting during the first 7 days after menstrual bleeding starts, no back-up method is needed for extra protection

Injectable contraceptive When to start (2)

Breastfeeding

- As early as 6 weeks after childbirth
- If menstrual periods have returned, she can start DMPA any time if it is reasonably certain that she is not pregnant

If not breastfeeding

- Immediately or at any time in the first 6 weeks after childbirth
- After 6 weeks, any time if it is reasonably certain that she is not pregnant

Injectable contraceptive When to start (3)

After miscarriage or abortion

- Immediately or in the first 7 days after either first- or second-trimester miscarriage or abortion
- Later, any time if it is reasonably certain that she is not pregnant

When stopping another method

- Immediately

Implants

- Implant system is a set of plastic capsules to be placed under the skin of women upper arm:
  - Contain progestin
  - Can prevent pregnancy for at least 5 years

Implants – Key points (1)

- Very effective for up to 5 years
- Convenient
- Can be used by women of any age, whether or not they have children
- Insertion and removal of Norplant capsules require minor surgical procedures by specially trained provider
- Removal of capsules must be convenient and available whenever the client wants

Implants – Key points (2)

- No delay in return of fertility after capsules are removed
- Changes in vaginal bleeding are likely – spotting, light bleeding between periods, or amenorrhea
- Safe during breastfeeding; nursing mothers can start implants 6 weeks after childbirth

Implants –Effectiveness

Very effective: 0.1 pregnancies/100 women (first year), 1/1000

Implants – Advantages (1)

- Very effective, even in heavier women
- Long-term pregnancy protection but reversible
- Increased sexual enjoyment
- Nothing to remember
- Effective within 24 hours after insertion
- Fertility returns almost immediately after capsules are removed

Implants – Advantages (2)

- Can be used by nursing mothers starting 6 weeks after childbirth
- No estrogen side effects
- Help prevent iron deficiency anemia
- Changes in menstrual bleeding are normal

  Light spotting or bleeding between monthly periods; prolonged bleeding; amenorrhea

Implants – Disadvantages (1)

- Headaches
- Enlargement of ovaries or enlargement of ovarian cysts
- Dizziness
- Breast tenderness and/or discharge
- Nervousness
- Nausea

Implants –Disadvantages (2)

- Acne or skin rash
- Change in appetite
- Weight gain (a few women loose weight)
- Hair loss or more hair growth on the face
- Most women do not have any of these side effects, and most side effects go away without treatment within the first year

Who can use implants?

- In general, most women
- Same conditions as injectable contraception

When to start?

- **Same conditions as injectable contraception**

Synthesis

- Hormonal contraception is very efficient
- Act by :
  - Stopping ovulation
  - Thickening cervical mucus
  - Do not work by disrupting pregnancy
- Can be use by most women
- Some medical situations must be assess before eligibility

Thank You for your Kind Attention