بسم الله الرحمن الرحيم

الحمد لله رب العالمين والصلاة والسلام على نبينا محمد خاتم الأنبياء وسيد المرسلين وعلى آله وصحبه أجمعين وبعد

Objectives of Maternal Child Health

- To reduce morbidity and mortality among mothers and children, through health promotion activities rather than curative interventions.
- To improve the health of women and children through expanded use of fertility regulation methods, adequate antenatal coverage, and care during and after delivery.

- To reduce unplanned or unwanted pregnancies through sex education and the wider use of effective contraceptives.
- .Promotion of reproductive health and the physical and psychosocial development of the child and adolescent within the family.
- To increase political awareness on the need to develop comprehensive intersectoral population policies using all available resources

M.C.H. in Jordan plays an important role in Jordan for many reasons:

- 1- Children < 15 years are = 37% of the population
- 2-Mothers (15%) and children are more than 1/2 of the population (50%)
- 3-Physiological changes that the mother and her child pass through
- 4- More sensitive to the environmental factors changes.

statistical figures which can reflect the situation of MCH services in any community

- **1-**Infant Mortality Rate (0-1 years/1000 live birth)Most sensitive indicator.
- 2-Child Mortality Rate) 1-4 years/1000 live birth)
- 3-Vaccination Rate

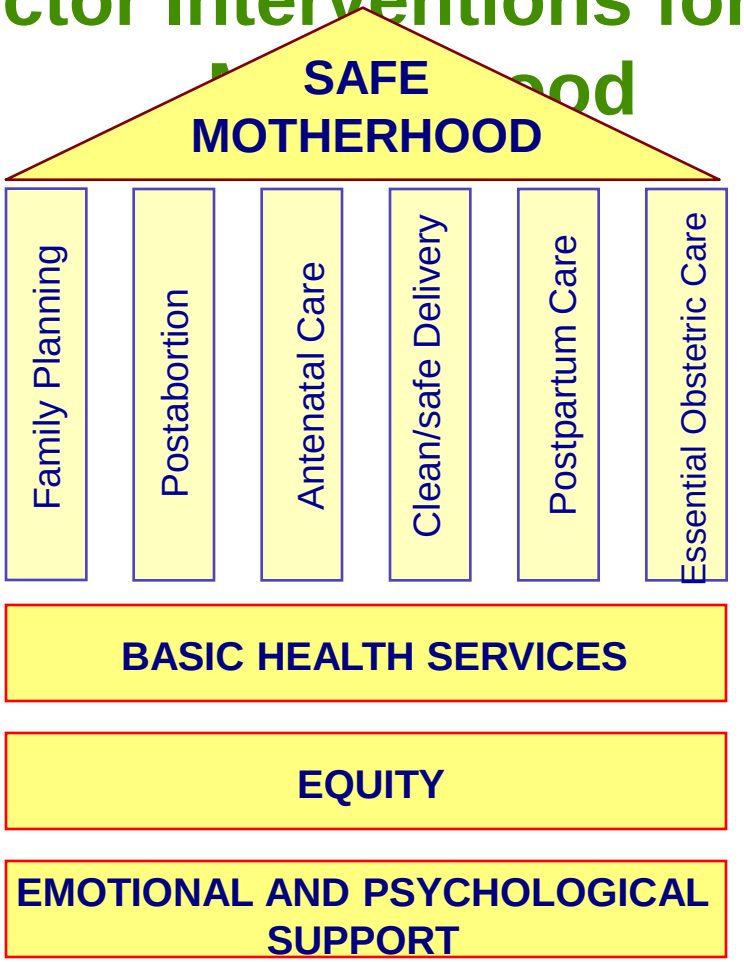
- 4-Maternal Mortality Rate /100,000 (15-49 years death duet Pregnancy , Labor and post partum period)The most sensitive indicator for maternal health..
- 5- % of mothers vaccinated against Tetanus Vaccinated
- 6-% of women visited ANC clinics.
- 7-Rate of Drs./10,000 persons

- 8--Rate of Nurses or midwives /10,000 persons.
- 9-% of Labor attended by Medical Staff.
- 10-% of women receiving family Planning Services.

Content of MCH Care Services and Priorities:

- **M.C.H. Care at various stages of development: (Services):**
- Maternal:
- Infant and Child.

A-Maternal: Essential Health Sector Interventions for Safe Motherhood



- 1-Premarital.
- 2-Preconceptional.
- 3-Conceptional: Care during pregnancies and labor: A.N.C. (Risky Pregnancy)
- 4-Delivery Care(Centers, Staff and Equipment’s)

  5-Postnatal and Family Planning Services.

Premarital

- Family health education
- Sexuality and puberty
- Marriage and parenthood
- Nutrition and weight monitoring.
- Avoiding hazards (smoking, Alcohol,drugs.)

- Immunization.
- Medical history , past medical history.
- STD
- Past Menstrual history.
- Physical examination.
- Genetic Counseling.

- Fertility investigation.
- Hormonal for females.
- Semen analyses for males.

Pre conception

- -Past and recent Medical history.
- Social history.
- Controlling risk factors.
- Psychological and social counseling.

Objectives of ANC

- Promote and maintain the physical, mental and social health of mother and baby by providing education on nutrition, personal hygiene and birthing process
- Detect and manage complications during pregnancy, whether medical, surgical or obstetrical
- Develop birth preparedness and complication readiness plan

- Help prepare mother to breastfeed successfully, experience normal puerperium, and take good care of the child physically, psychologically and socially

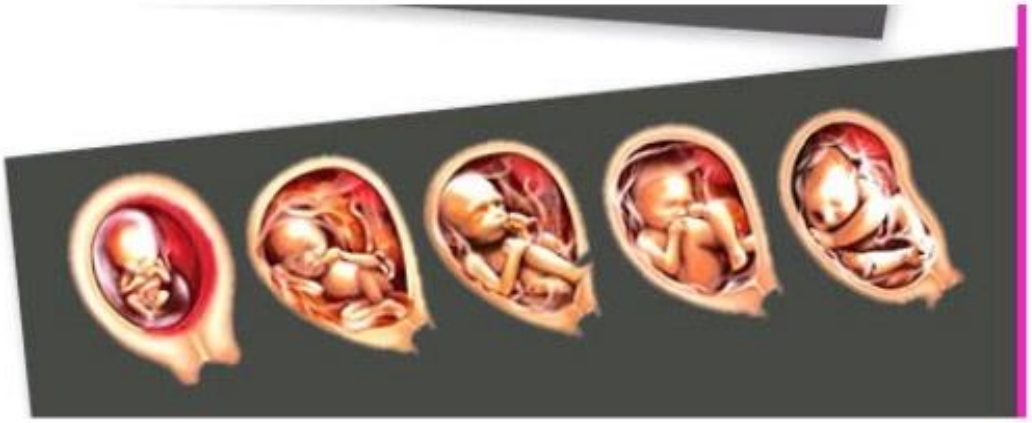
What is antenatal care

Antenatal care is a systemic supervision of a women during pregnancy to monitor the progress of foetal growth and to ascertain the well being of the mother and the foetus

A proper antenatal check ups provides necessary care to the mother and to help identify any complications of pregnancy

Why antenatal care is important

To ensure a normal pregnancy with delivery of a healthy baby from a healthy mother



Why antenatal care is important

- Prevent development of complications
- Decrease maternal and infant mortality and morbidity
- Remove the stress and worries of the mother regarding the delivery process
- Teach the mother about child care, nutrition, sanitation and hygiene
- Advice about family planning

Antenatal checks and tests

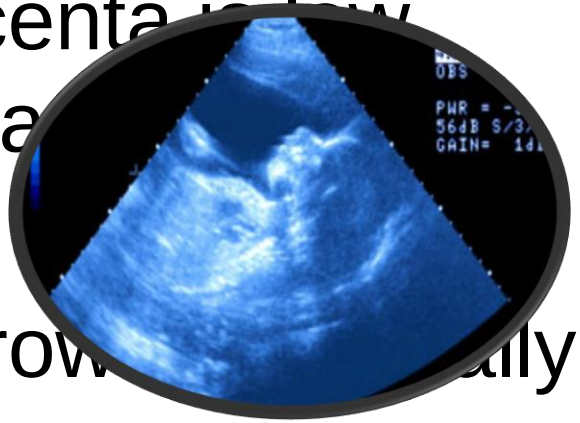
- **Weight and height checks**

  to calculate BMI (body mass index)
- **urine tests**

  urine is checked for several things , including protein or albumin
- **Blood pressure test**
- **Blood tests**
- **ultrasound scan**

What can an ultrasound scan be used for?

- To check the baby size.
- To detect abnormalities.
- To show the position of the baby and the placenta.
  For example, when the placenta is low down in late pregnancy, a ca… section may be advised.
- To check that the baby is grow… …ally



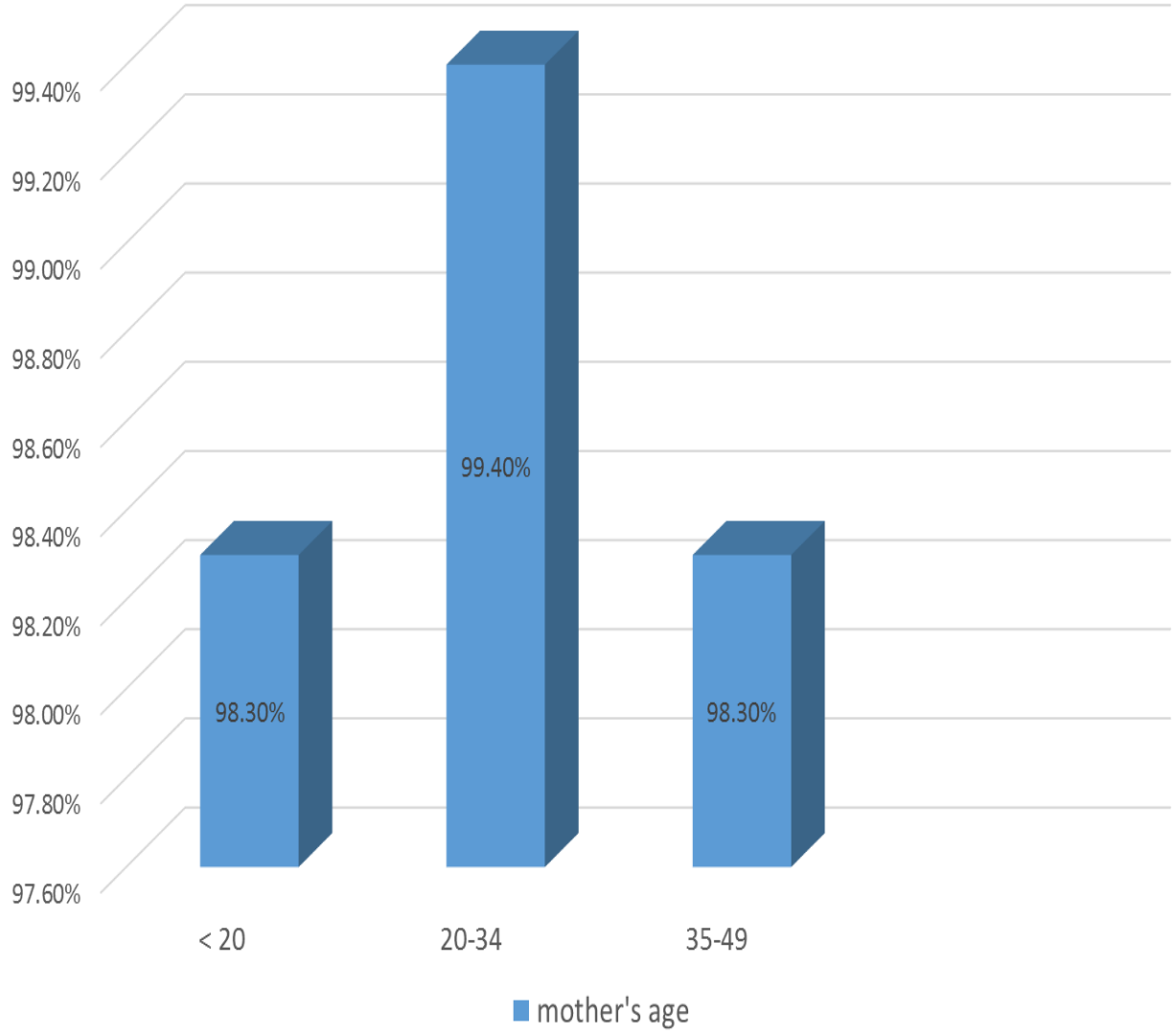
* http://www.nhs.uk/conditions/pregnancy-and-baby/pages/ultrasound-anomaly-baby-scans-pregnant.aspx

Pregnancy risk factors that should be considered in ANC :

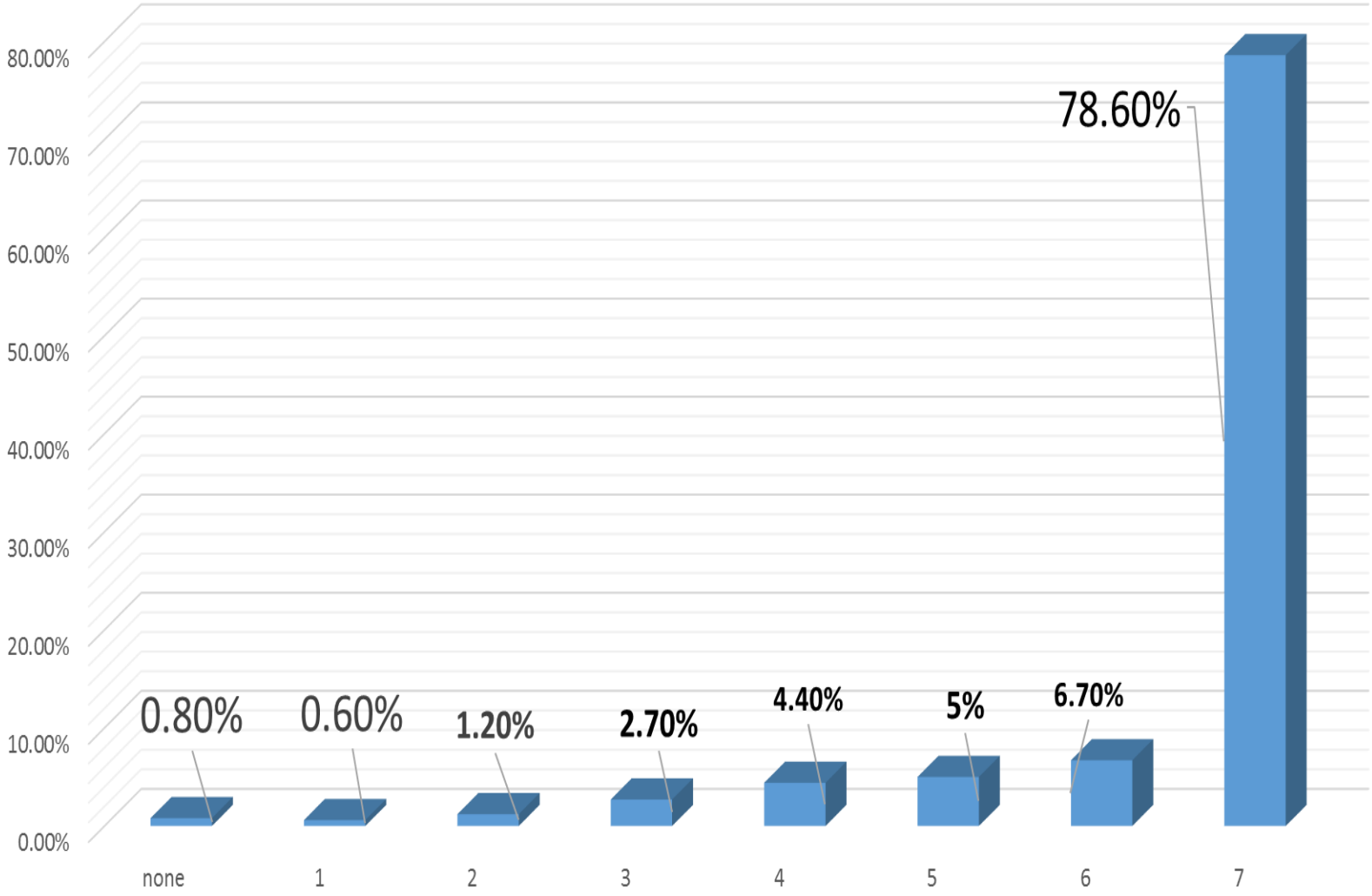
- 1- Age
  2-Ht. And Wt.
  3-Residency
  4-Education
  5-Income
  6-Parity

- 7-Past Medical history
  8-Past obstetric history Smoking or any drug therapy
  9-General condition of the woman pre-concept ional
- 10-Hb level, nutritional, blood pressure and general condition.

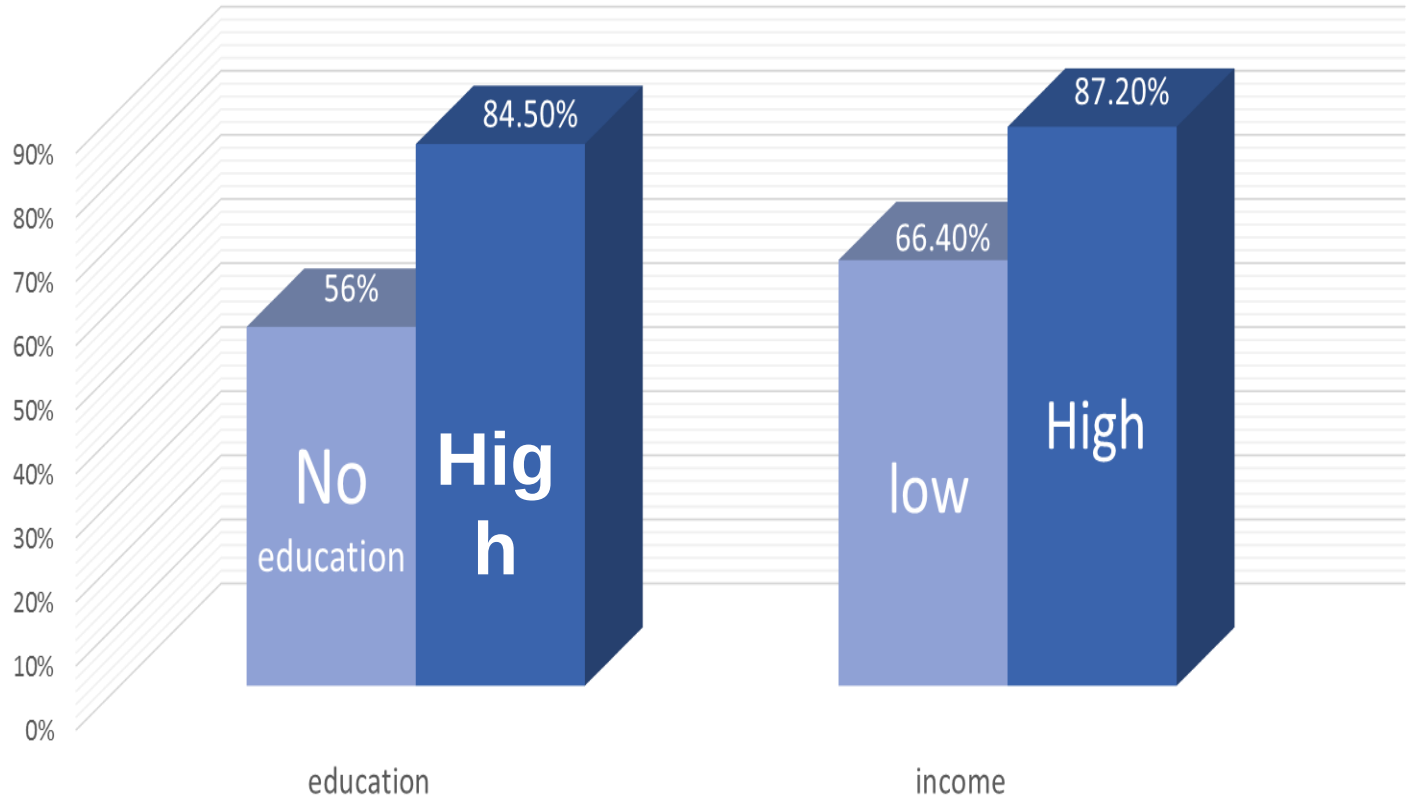
Antenatal care in Jordan (according to mother's age) in 2012 *JPFHS*



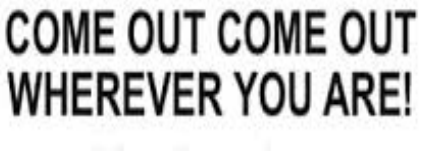
Antenatal care in Jordan(according to number of visits) in 2012 *JPFHS*



Antenatal care in Jordan in 2012 *JPFHS*



- Antenatal care centers should provide programs to seek out women unable or unwilling to attend a clinic and take the services to them, and so attaining a coverage of 100% as we are not far from reaching this number



Antenatal classes in Europe

topics covered by antenatal classes are:

- health in pregnancy, including a healthy diet
- exercises to keep fit and active during pregnancy
- what happens during labour and birth
- coping with labour and information about different types of pain relief
- relaxation techniques during labour and birth
- information about different kinds of birth and interventions
- caring for the baby, including feeding
- health after birth
- "refresher classes" for those who've already had a baby

Antenatal care and pregnancy complications

Problem	Symptoms
Anemia Hb.< 10	• Feel tired or weak •Look pale •Feel faint •Shortness of breath
Gestational diabetes Too high blood sugar levels during pregnancy	•Usually, there are no symptoms. Sometimes, extreme thirst, hunger, or fatigue • Screening test shows high blood sugar levels
High blood pressure (pregnancy related) High blood pressure that starts after 20 weeks of pregnancy and goes away after birth	• High blood pressure without other signs and symptoms of preeclampsia

Miscarriage **Pregnancy loss from natural causes before 20 weeks. As many as 20 percent of pregnancies end in miscarriage. Often, miscarriage occurs before a woman even knows she is pregnant**	**Signs of a miscarriage can include:** **Vaginal spotting or bleeding*** **Cramping or abdominal pain** **Fluid or tissue passing from the vagina** *** Spotting early in pregnancy doesn't mean miscarriage is certain. Still, contact your doctor right away if you have any bleeding.**
Preeclampsia A condition starting after 20 weeks of pregnancy that causes high blood pressure and problems with the kidneys and other organs. Also called toxemia.	High blood pressure Swelling of hands and face Too much protein in urine Stomach pain Blurred vision Dizziness Headaches
Preterm labour – Going into labour before 37 weeks of pregnancy	Increased vaginal discharge Pelvic pressure and cramping

Delivery

- When
- Where
- Who
- How :Normal or CS

Post Natal Care.

- Support and education.
- Examination.
- Family Planning.

بسم الله الرحمن الرحيم

الحمد لله رب العالمين والصلاة والسلام علي سيدنا محمد الصادق الوعد الأمين ، اللهم أخرجنا من ظلمات الجهل والوهم ، إلى نور المعرفة والعلم..

Family Planning Services

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MD. MPH.

Community and Family Medicine Department.

Medical School

University of Jordan

What is family planning?

Family planning services are defined as "educational, comprehensive medical or social activities which enable individuals, including minors, to determine freely the number and spacing of their children and to select the means by which this may be achieved. [1] WHO website

US Dept. of Health, Administration for children and families(2012) .1

Goals of Family Planning services

- 1- Enable women and men to limit family size
- 2- It safeguards individual health and rights
- 3- Preserves our planet's resources
- 4- Improves the quality of life for individual women, their partners, and their children

- 5- Prevent unwanted or risky pregnancies
- 6- Decreases incidence of congenital abnormalities
- **7- Decreases Maternal and infant mortality rates**
- 8- Control the world population size
- 9- Improves all aspects of life standers economical , educational, and health psychological

Counseling

- **GREAT**
- a) Great
- b) Reassure
- c) Explain
- d) Answer
- e) Therapy/Rx.

Counseling

- Choosing a birth control method is an important decision . Some of the things you might want to consider when choosing a method are :
-
- 1- Personal consideration
- 2- Effectiveness
- 3- Safety
- 4- Cost

Counseling on Family Planning:

1) A detailed history

2) Information on all available methods

3) All practical points related to the use of the selected method must be discussed in detail

Contraceptive efficiency:

It is the measurement of unplanned pregnancies even after the use of contraceptive measures.

Contraceptive Methods:

- **1-Traditional or Natural Methods**

a-Abstinence : not having sexual intercourse

b-Withdrawal (Coitus interrupts): pulling out

c-Fertility Awareness Method (FAM) : basal body temperature (BBT)

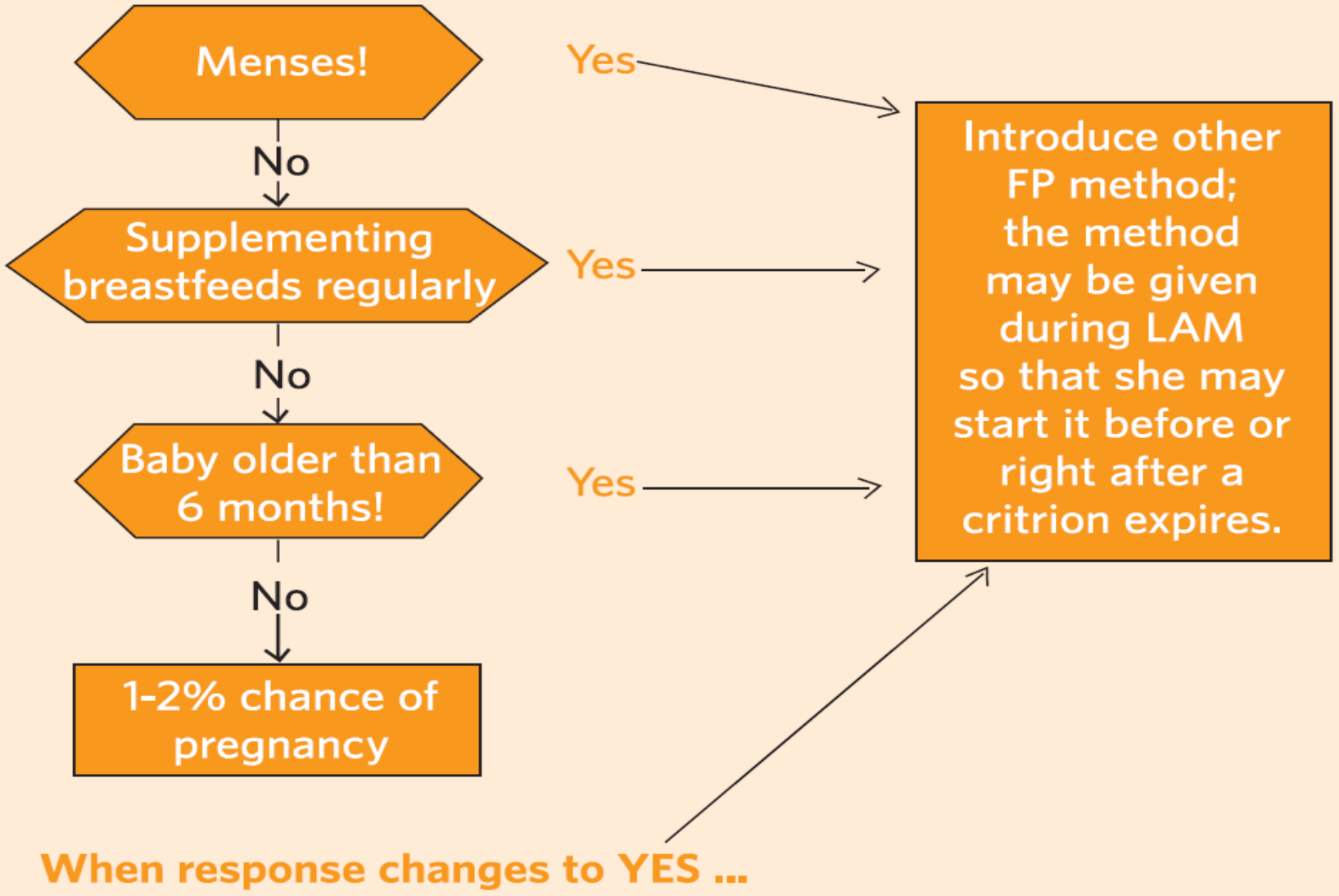
Traditional Methods

d) Breast Feeding

LAM (Lactation Amenorrhea Method).

- Risk of pregnancy is 1.8% at the end of 6 months after delivery in women who exclusively breast-feed & who have not yet started to menstruate.
- Cheap method
- No side effects
- Many other advantages of breast feeding.

Lactational Amenorrhea Method Algorithm



Abstinence : Safe Period

Drawbacks:

- Irregular cycle so difficult to predict
- Only for educated and responsible couples
- Programmed Sex

High Failure rate

Complication:

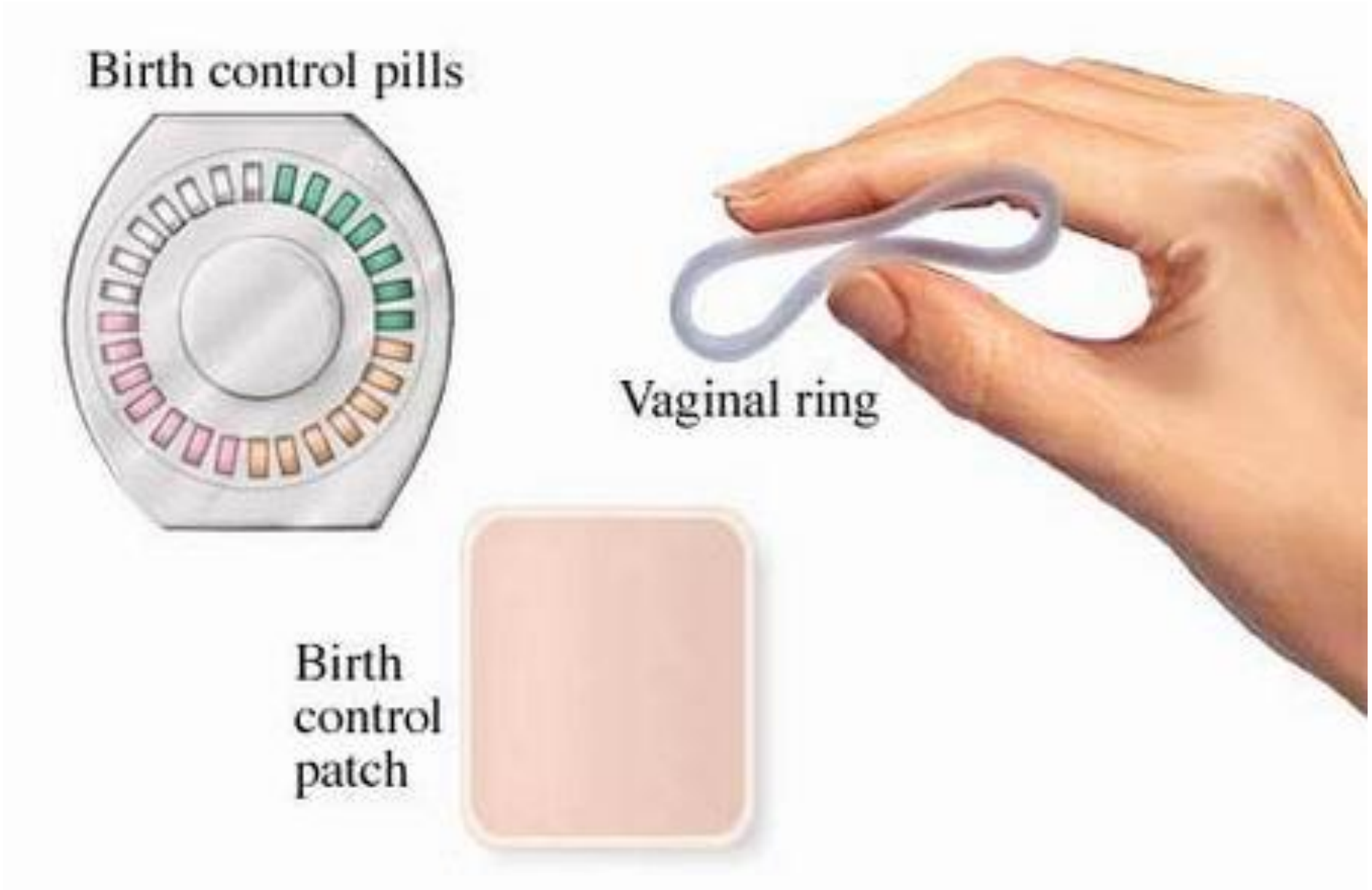
Embryonic Abnormalities, Ectopic Pregnancy

Fertility Awareness Method (FAM) : basal body temperature (BBT)

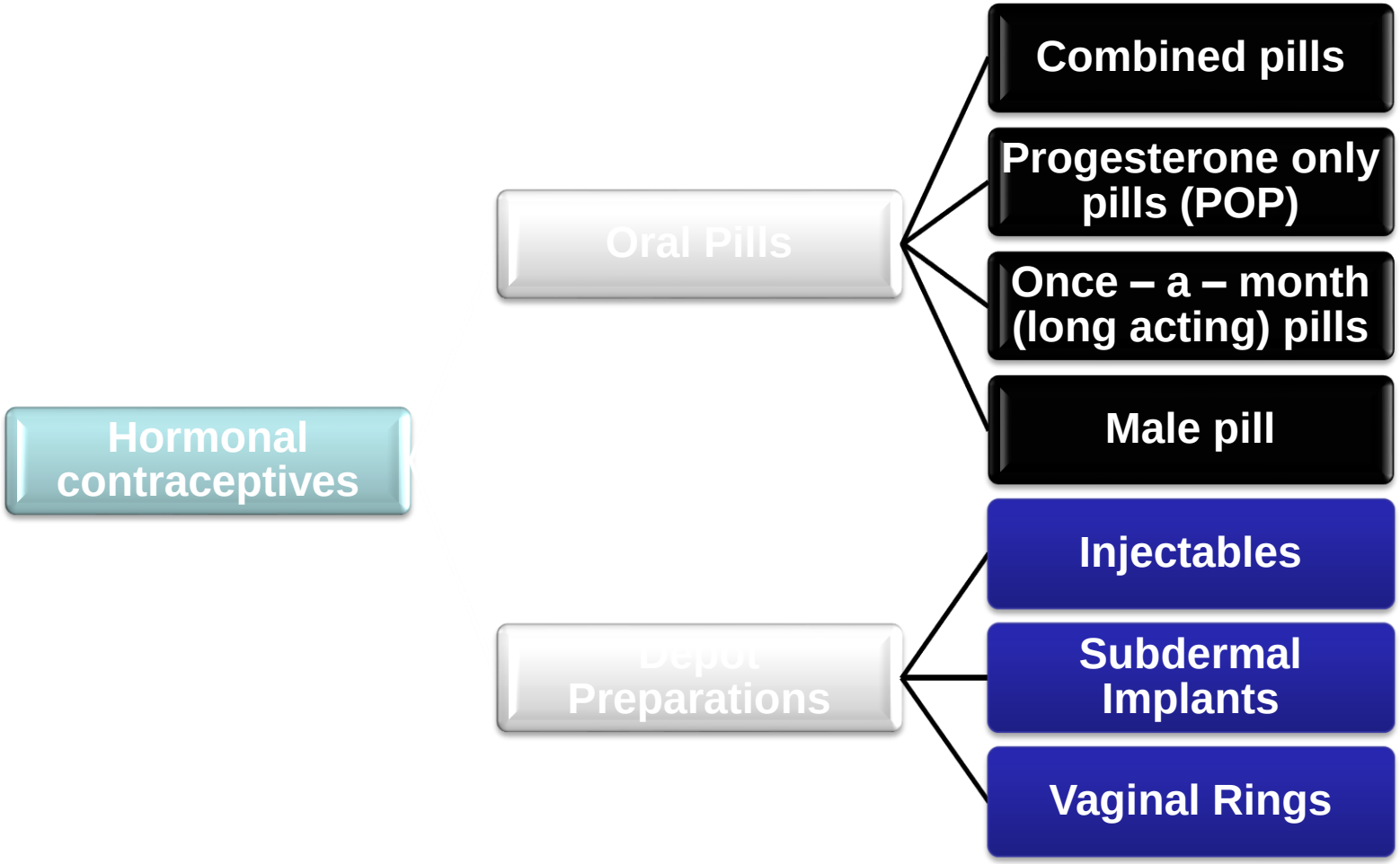
Basis: same as calendar method but here the women employs self recognition of certain signs and symptoms associated with ovulation.

a) Basal Body temperature method
b) Cervical mucous method
c) Symptothermic : It is based on the observation of changes in different body signs: cervical secretions, basal body temperature and the position of the opening of the cervix.

2-HORMONAL METHODS



CLASSIFICATION OF HORMONAL CONTRACEPTIVES



ORAL CONTRACEPTIVES

COMBINED PILLS

COMPOSITION:

- In early 1960s –
  - **Oestrogen** - 100-200μg and
  - **Progesterone** - 10mg
- **Greater side effects**

- Nowadays
  - **Oestrogen** - 30-35μg and
  - **Progesterone** - 0.05-0.15mg.

Taken from 5th to 25th day of menstrual cycle, followed by a break of 7 days (**withdrawal bleeding**).

- Failure rate: 0.1

MECHANISM OF ACTION:

A)Prevents ovulation
B)Prevents implantation
C)Makes cervical secretions thick

EFFECTIVENESS

100% effective if taken correctly.

Beneficial Effects with Combination Oral Contraceptives

- 100% effective in correct users.
- Beneficial effects on menorrhagia (anemia), dysmenorrhea, ovulatory pain, acne and hirsutism
- Lower the risk of endometrial, ovarian- (30-50%) and possibly colon cancer
- Preserves bone mineral density
- May reduce the risk of ovarian cysts, rheumatoid arthritis, benign breast disease & Ectopic preg.
- May have protective effect against atherosclerosis

Untoward Effects with Combination Oral Contraceptives

- Cardiovascular effects
  - hypertension in 5% users
  - myocardial infarction
- Stroke ; ischemic or haemorrhagic
- DVT's especially smokers >35, overweight and sedentary
- Cancers (increase risk of)
  - breast
  - hepatocellular
  - cervical
- Endocrine and metabolic effect, impaires glucose tolerance and responses to glucose challenge
- Breast tenderness, Weight gain, Headache and migraine

CONTRAINDICATIONS TO OCP USE

Absolute Contraindications

- Cancer of breast and Genitals
- H/O venous thromboembolism
- Vascular disease- CAD or CVD
- Liver disease (i.e. Viral hepatitis, cirrhosis)
- Pregnancy
- Congenital hyperlipidaemia

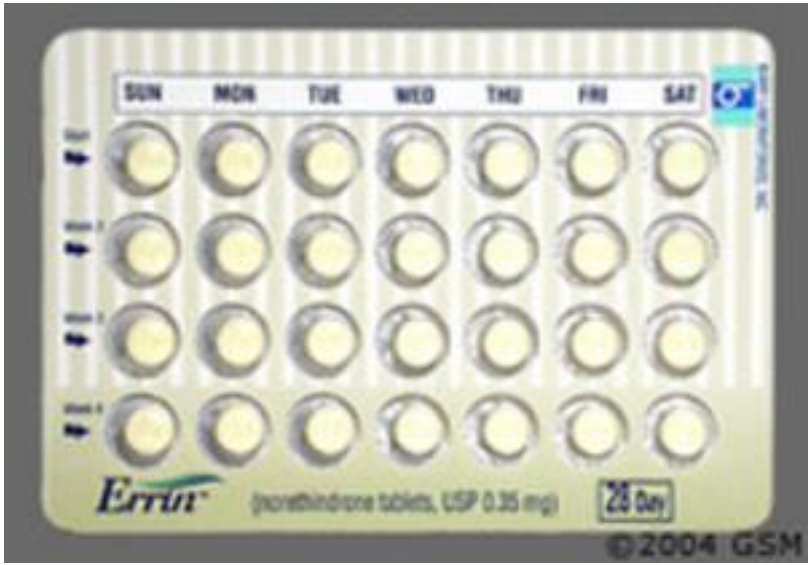
Relative Contraindications

- Age above 40 yrs.
- Smoking and age above 35 yrs
- HTN with SBP>160, DBP>99
- Chronic renal diseases
- Epilepsy , Migraine
- Hyperlipidemia LDL>160
- DM with secondary complications
- Infrequent bleeding, Amenorrhoea.

- Postpartum women - not breastfeeding can start combined hormonal methods at 3 weeks (MEC category 2).
- Women who have additional risk factors for venous thromboembolism (VTE) generally should not start combined hormonal methods until 6 weeks after childbirth, depending on the number, severity, and combination of the risk factors (MEC category 2/3).

PROGESTERONE ONLY PILLS

Minipill or Micropill.



COMPOSITION:

•Low dosage of progesterone, mainly Norgestrel 0.075mg

DOSAGE:

•One tab daily throughout the menstrual cycle

•It is mainly given in older women in whom combined pills are C/I as in CVDs

Efficacy 96-98%

Failure rate:0.5/HWY

POP (CONTD...)

MECHANISM OF ACTION:

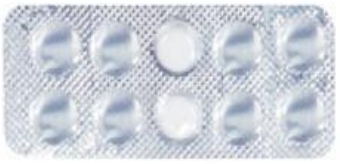
- Makes cervical mucosa thick – action starts in 2-4 hrs last for 24hrs.
- Decreases the motility of Fallopian tubes.
- **Prevent pregnancy without preventing ovulation, as ovulation occurs in 20-30% women.**

- SUITABLE FOR
  - Lactating women
  - Smokers above 35 yrs old
  - Estrogen sensitive women

DISADVANTAGES:

Higher risk of neoplasia in women taking POP than in women on Combined Pills

- Poor control of cycle.



Safer Pill if taken within 72 hours of unprotected sex

EMERGENCY ORAL CONTRACEPTIVE PILL

T-Pill 72™

Levonorgestrel 1.5 mg Tablet

A pill that cares for you

BestoChem® An ISO 9001:2000 Company

POST COITAL PILLS (CONTD...)

MECHANISM OF ACTION:

- Hypermotility of fallopian tube
- Hypermotility of uterus hence no implantation and fertilization

DISADVANTAGES:

Nausea and vomiting.

Next period may start earlier or later

Do not protect against STI & HIV

ONCE A MONTH (LONG ACTING) PILL

In this method a long acting oestrogen (**Quinestrol**) + short acting progesterone is given

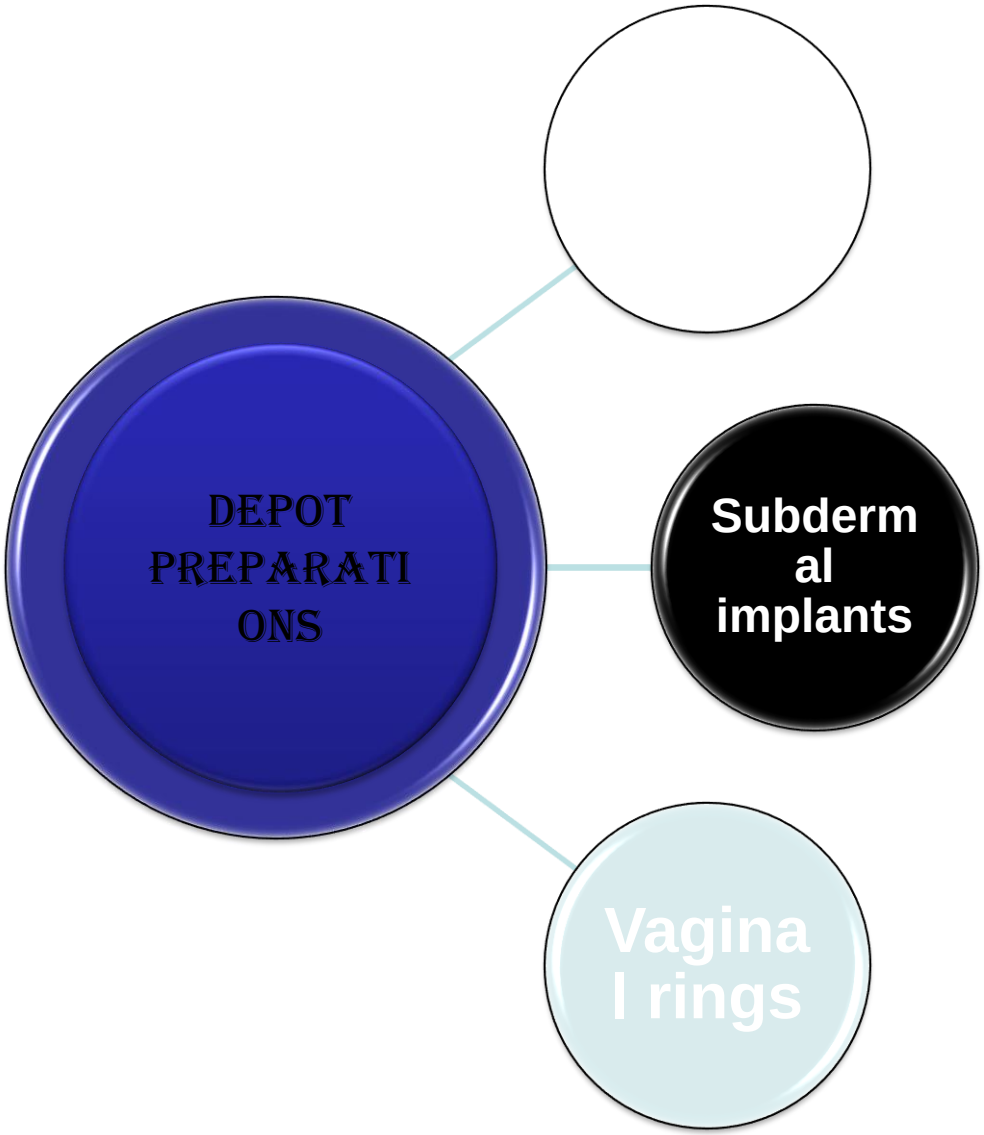
But the results are highly disappointing.

MALE PILLS

The hormones which reduce sperm count tend to reduce testosterone levels hence they affect potency and libido

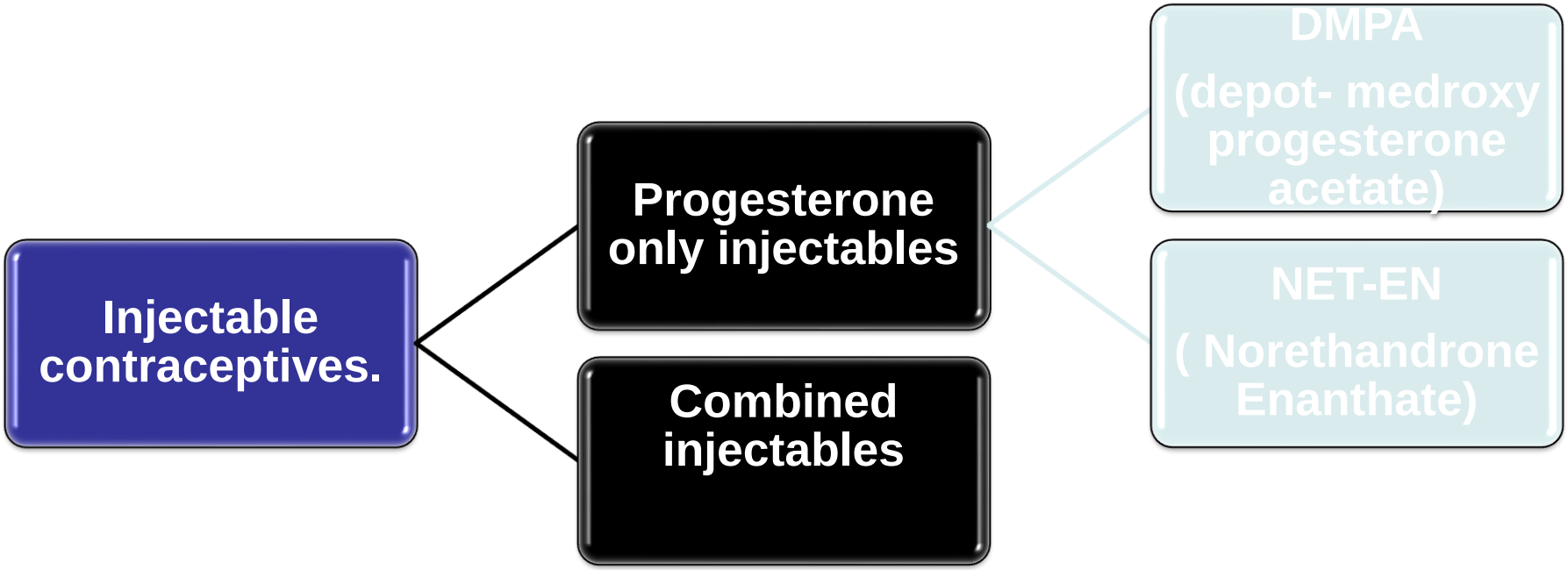
- Cotton seed derivative
- Causes azoospermia and severe oligospermia
- Toxic
- Use for 6 months leads to complete sterility

DEPOT PREPARATIONS


DEPOT PREPARATIONS
Subdermal implants
Vaginal rings

INJECTABLE CONTRACEPTIVES

Classification



SIDE EFFECTS:

- Disruption of normal menses
- Amenorrhoea

CONTRAINDICATIONS:

- Breast cancer
- Genital cancer
- Undiagnosed uterine bleeding
- Suspected malignancy
- Lactating women

Failure rate: 0.3/HWY

SUBDERMAL IMPLANT

- **Norplant**

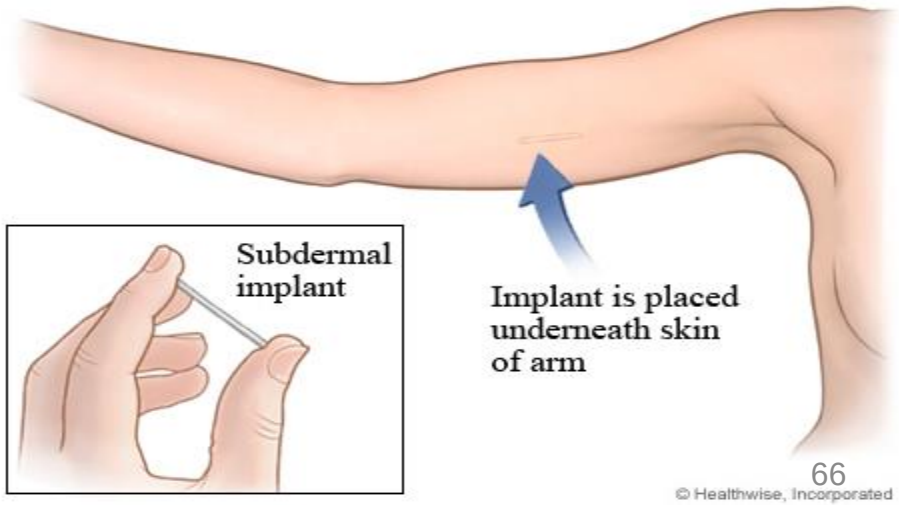
For long term contraception. Has 6 capsules containing 35mg each of norgestrel.

- **Norplant R2** – contains rods of norgestrel. Contraception is achieved in 24hrs & lasts for 5-6 yrs

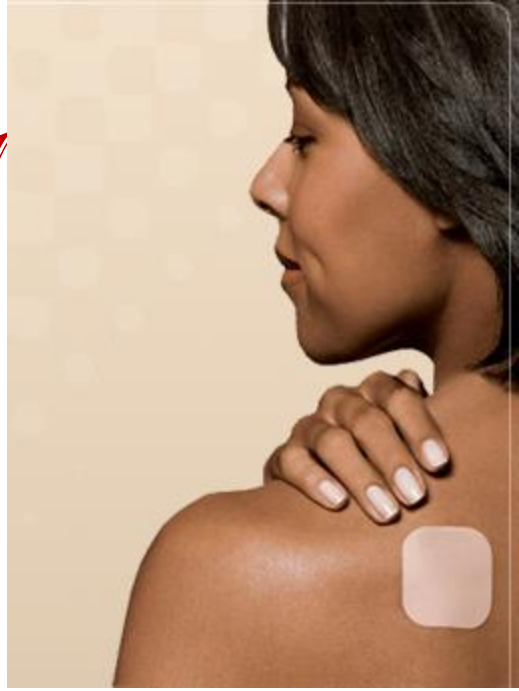
Disadvantage:

Surgical procedure

Failure Rate: 0.1/HWY



THE PATCH (ORTHOEV



- The ORTHO EVRA patch
  is a thin & plastic patch
  that sticks to the skin.
- The sticky part of the patch contains the hormones: norelgestromin (progestin) and ethinyl estradiol (estrogen).
- Weekly for 3wks then patch free 1 week.
- These hormones are absorbed continuously through the skin and into the bloodstream.

Vaginal ring (NuvaRing)

- **Etonorgestrel 120mcg +Ethinylestradiol 15mcg daily**
  - Use for three weeks with a withdrawal week
  - Inhibits ovulation
  - Cycle control good
  - Effective – Pearl index 1.8
  - Non-latex
- Implanted intravaginally
- The progesterone is absorbed slowly throu mucosa.
- Store 2-8 degrees; if room temperature, up to 4-12
- NuvaRing is 98% effective when used correctly.
- Effectiveness: Overall perfect use failure rate 0.3%, typical use failure rate 8%

ABORTION

Definition:

Termination of pregnancy before the foetus becomes viable

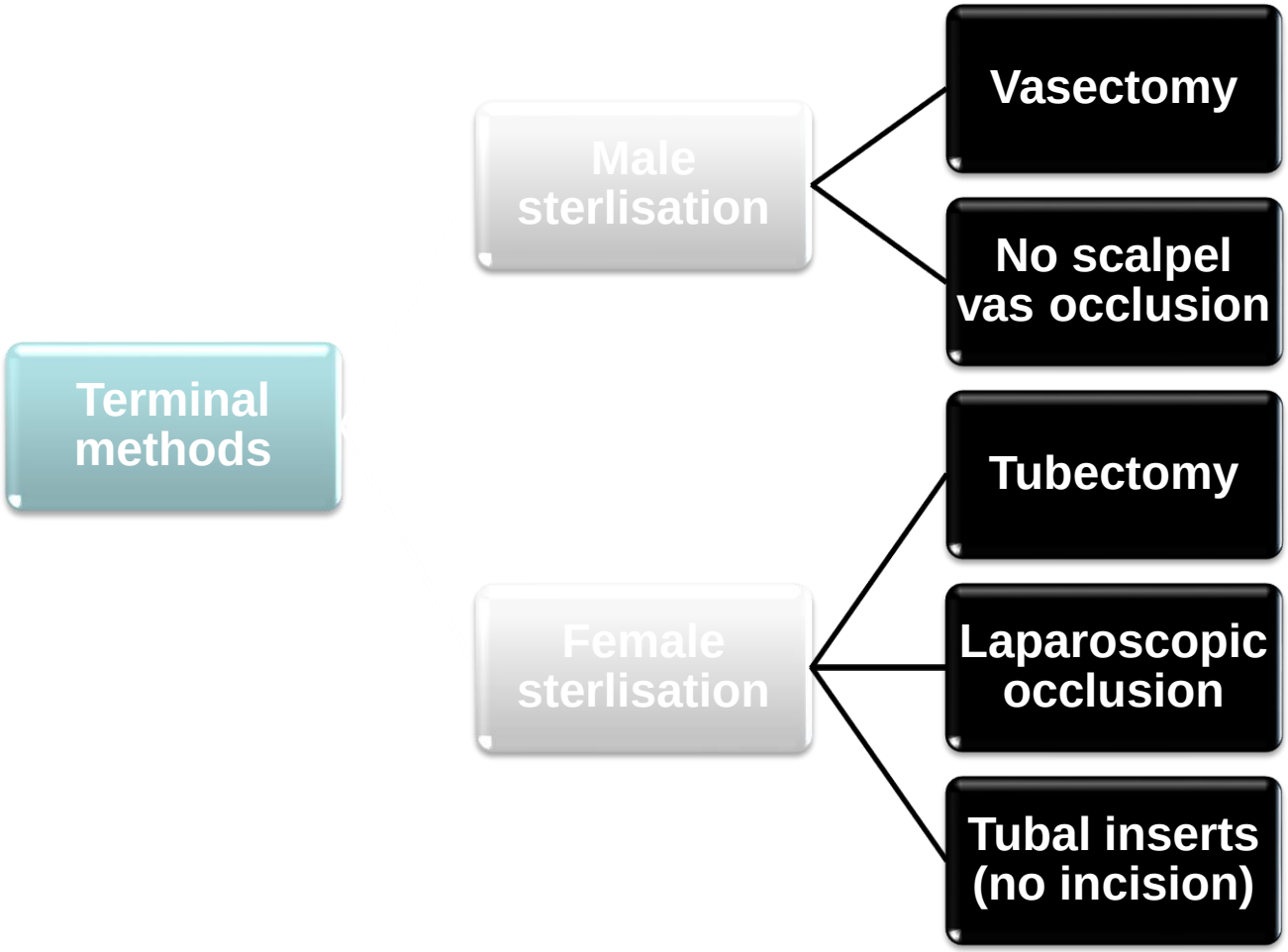
LEGALISATION

Medical termination of pregnancy act 1971

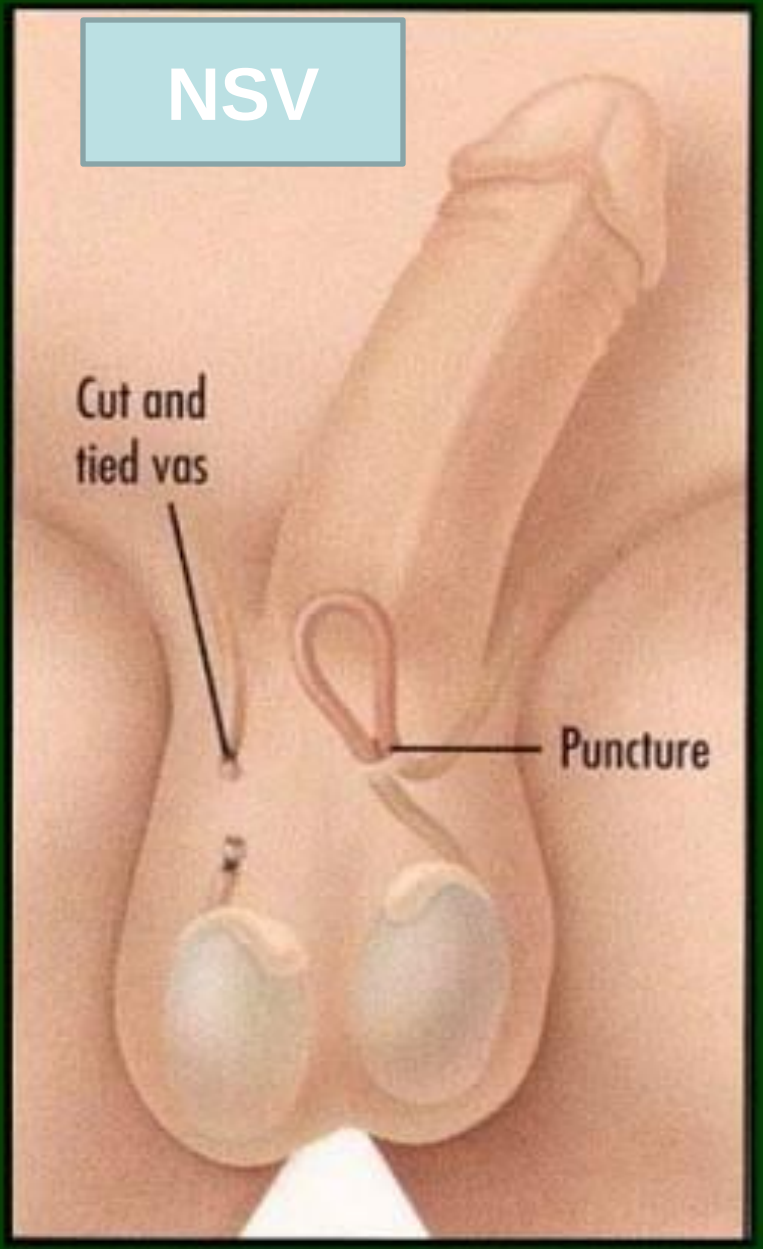
1) Conditions under which abortion is done

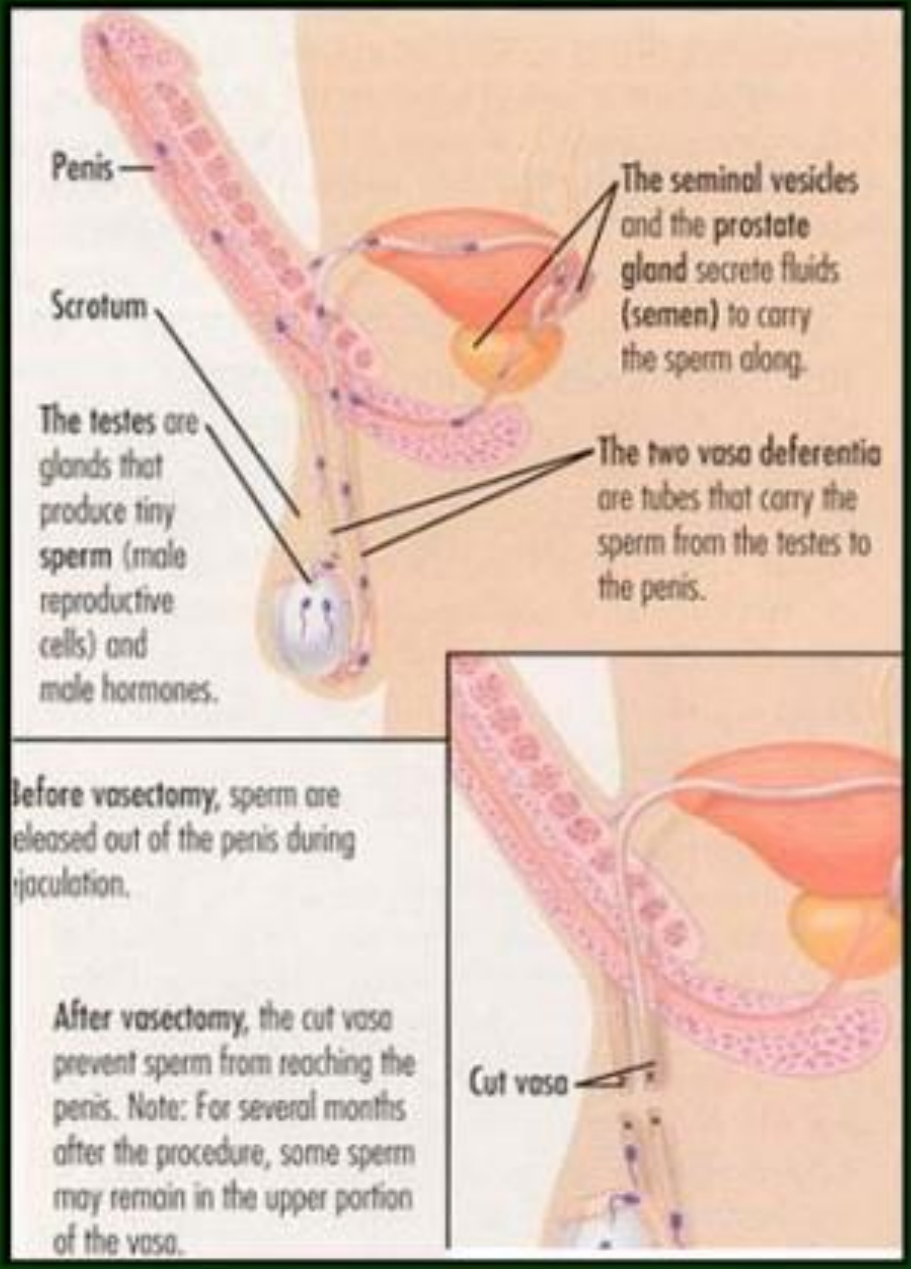
- Medical
- Eugenic
- Humanitarian
- Socio-economic
- In failure of contraceptive device

TERMINAL METHODS



NSV


Cut and tied vas
Puncture

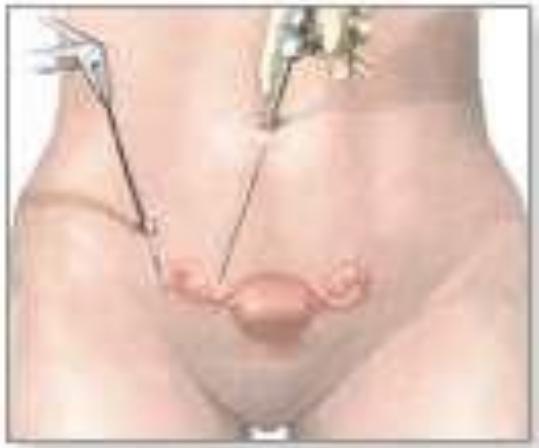

Penis
Scrotum
The testes are glands that produce tiny sperm (male reproductive cells) and male hormones.
The seminal vesicles and the prostate gland secrete fluids (semen) to carry the sperm along.
The two vasa deferentia are tubes that carry the sperm from the testes to the penis.
Before vasectomy, sperm are released out of the penis during ejaculation.
After vasectomy, the cut vasa prevent sperm from reaching the penis. Note: For several months after the procedure, some sperm may remain in the upper portion of the vasa.
Cut vasa

Failure Rate: 0.15/HWY (due to mistaken identification of vas)

COMPLICATIONS:

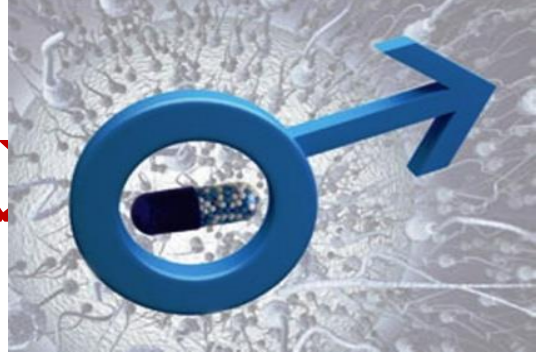
- Operative
- Sperm granules
- Spontaneous recanalisation
- Autoimmune response
- Psychological response

TUBECTOMY



Failure rate: 0.5/HWY

1.NEW MALE PIL



- The pill contains desogestrel as well as testosterone.

  Blocks the production of sperm while maintaining male characteristics and sex drive.
- It must be taken daily.
- 100% effective and completely reversible in preliminary clinical trials .
- In clinical trials, all of the participants' sperm counts dropped to zero, which means that the male pill would be more effective than the condom and even the female pill.

Mechanical Methods

Intrauterine Device:

Plastic T – shaped piece, covered with copper, inserted in the uterus

Efficacy rate: 1/100 women/year

ADVANTAGES OF IUDs:

Safe, Effective, Reversible
Inexpensive
High continuation rate

DISADVANTAGES OF IUDs:

Heavy bleeding and pain
Pelvic Inflammatory diseases
Ectopic pregnancy
May come out accidently if not properly inserted

Types of IUDS

IUD	EFFECTIVENESS
Progestasert	12-18 months
CuT 200	4 yrs
Nova T	5yrs
CuT 380 A	10yrs
Levonoregestrel	5 yrs

IDEAL IUD CANDIDATE:

- Who has borne at least 1 child
- Has no history of PID
- Has normal menstrual periods
- Is willing to check IUD tail
- Has an access to follow up and treatment of potential problems
- Is in monogamous relationship

Condoms:

Rubber pouches which prevent the ejaculation from reaching the vagina

No side effects whatsoever

Effective in prevention of STD transmission

Does not affect lactation

Contraindicated in cases of sensitivity to latex

DISADVANTAGE:

Chances of slip off and tear off

Failure rate: 2-3%

What Do Religions Say About Birth Control and Family Planning?

- The knowledge of contraception has been accounted for since early times.
- Family planning is embraced by religions across the spectrum as a moral good, a responsible choice, and a basic human right. The world's religions recognize that family planning helps build strong families, protect the health of women and children.
- According to survey research, 83 percent of the Islamic religious leaders in Jordan believe that family planning is permitted under Islam

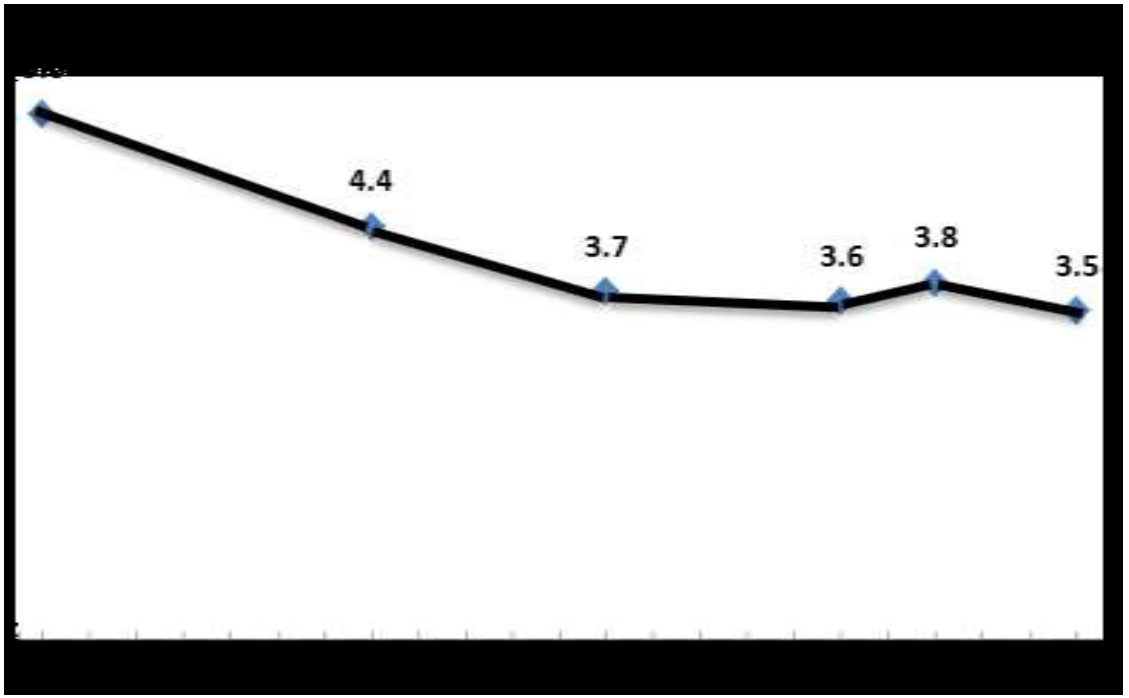
Family Planning in Jordan

- At current fertility levels JPFHS (Jordan Population and Family Health Survey) 2012, a woman in Jordan will have an average of 3.5 children – a total fertility rate that is 50 percent lower than the rate recorded in 1976 (7.4 children per woman)

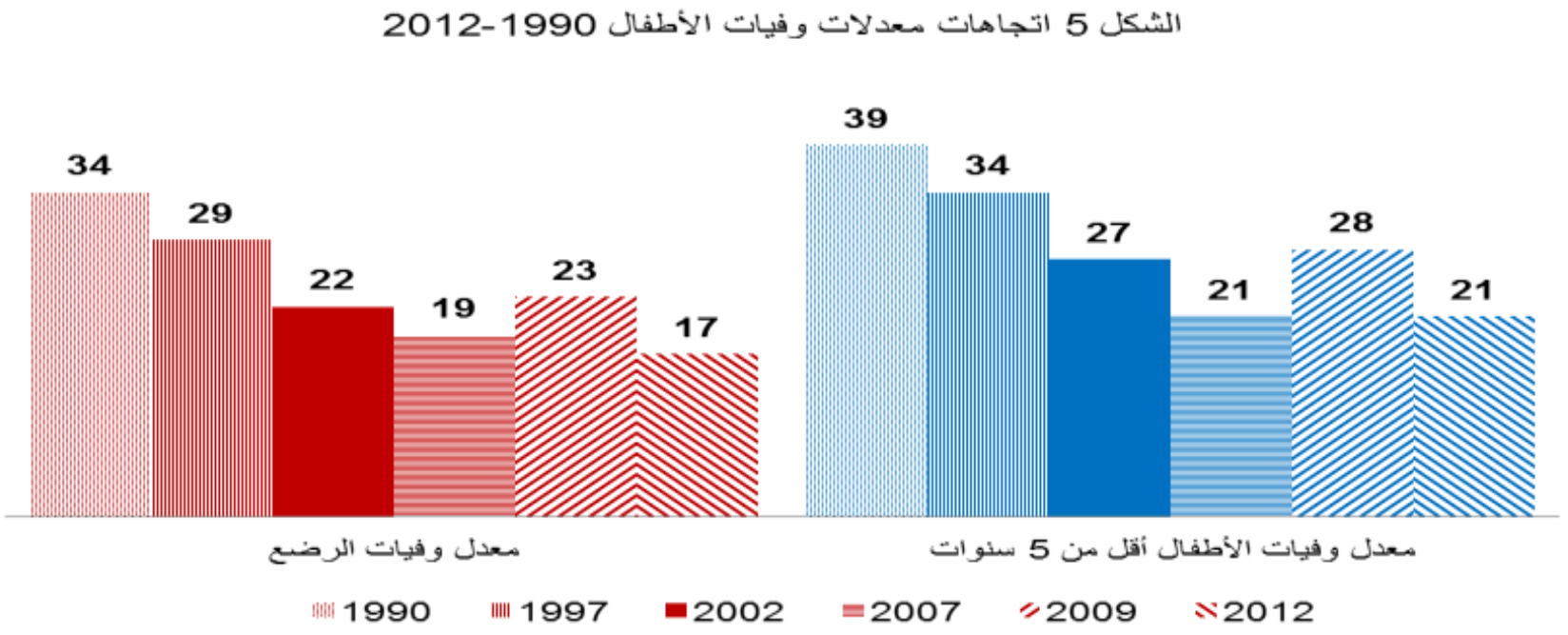
- Effective family planning is increasingly seen as an important part of Jordan's overall development strategy.
- In contrast to several years ago, such programs are openly discussed and rarely encounter public opposition.

Fertility Rates in Jordan:

The figure shows the overall fertility rates in Jordan from 1990(5.6)-2012(3.5).



Decrease of infant and child mortality/1000 live birth with decrease of fertility rate



- Its obvious how the rapid the fertility rate decreased from 5.6 in 1990 to 3.7 in 2002. and then the fertility rate is fluctuating between 3.5 and 3.8 between 2002 and 2012.
- Family Planning had a great role in controlling and decreasing fertility rates during this period.

Family planning in Jordan:

- Jordan is one of the most modern countries of the Middle East with a population that has grown from 2.1 million to reach 6.3 million in 2012.
- **Fertility declines in Jordan have contributed to a slowing down in the population growth rate from 3.2 % in the second half of 1990, to 2.3 % 2007, to 2.2 in 2012.**

Population growth averaged
4.8 % during the period 1961-1979,
4.4 % between 1979 and 1994,
2.6 % between 1994 and 2004,
and 2.2 % between 2004 and 2012.

The high rates of growth have been due to the influx of immigrants to the east bank from the west bank, the inflow of large numbers of foreign workers, and the return of about 300,000 Jordanians from the gulf area as a result of the 1990 gulf war.

- The rapid increase in the population has created several problems for the country such as food shortage , water, housing and employment.

Birth Control and Current Use of Contraceptives:

- The level of current use of contraception is one of the indicators most frequently used to assess the success of family planning activities.

- Overall, use of any method among currently married women has increased substantially in the last two **decades—Contraception Prevalence Rate**:
- 40% of women in the 1990 JPFHS survey
- 53% in the 1997 JPFHS,
- 56% in the 2002 JPFHS,
- 57%in the 2007 JPFHS
- 59% in the 2009 JPFHS
- and 61% in the 2012 JPFHS
- *JPFHS : Jordan Population and Family Health Survey.

- Results from the 2012 JPFHS indicate that **61%** of currently married women are using a contraceptive method;
- 42% are using modern methods

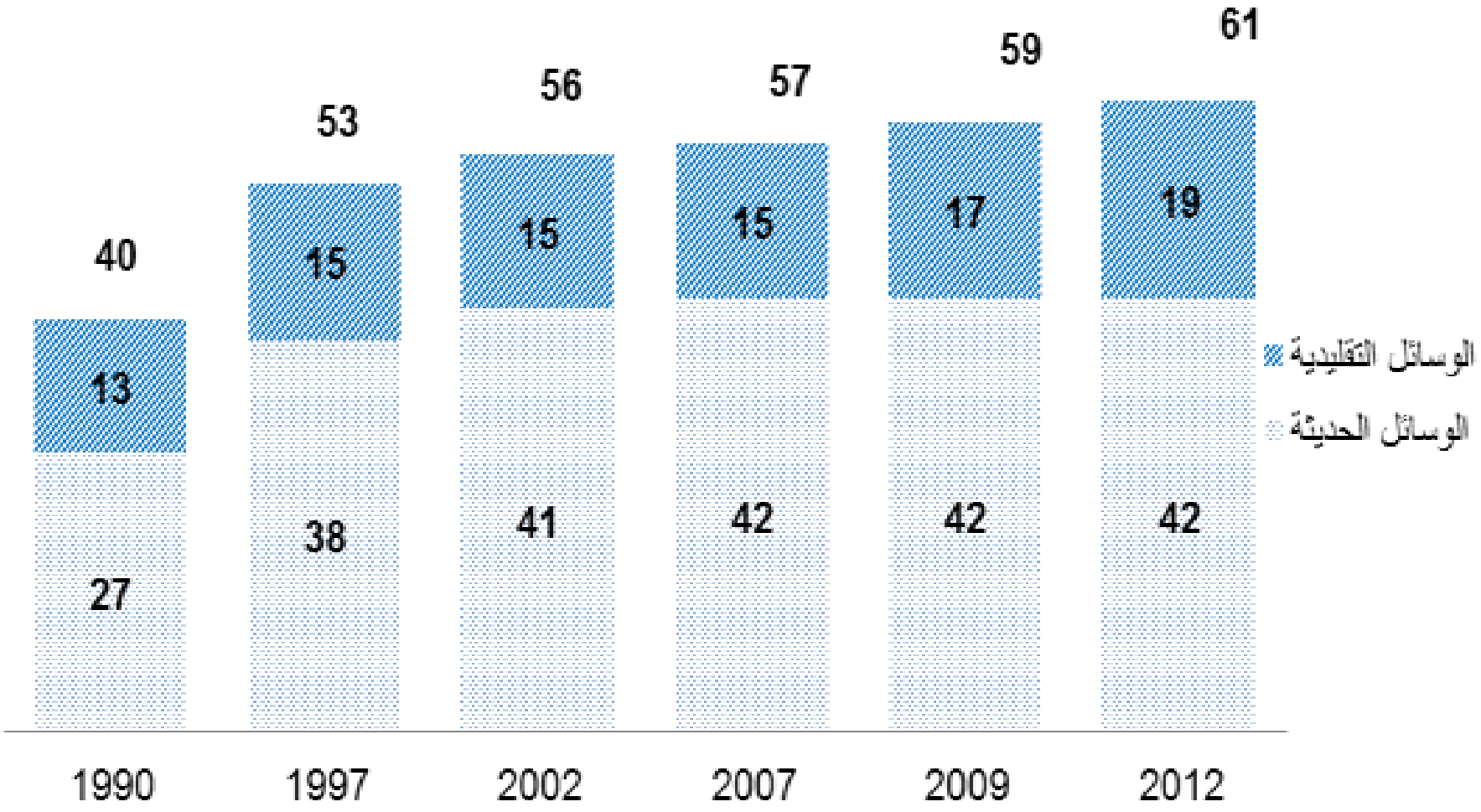
  19% are using traditional methods.

- The IUD is the most widely adopted modern method (21 %), followed by the pill and male condom (8% each), female sterilization (2%), and LAM and injectables (1% each).

  Less than 1 % of women rely on other modern methods.

- Withdrawal (14%) and rhythm (4%) are the most common traditional methods.

الشكل 4 اتجاهات استعمال وسائل تنظيم الأسرة حسب نوع الوسيلة، 1990-2012
(نسبة السيدات المتزوجات حالياً في العمر 15-49 سنة)



SOURCE OF SUPPLY FOR MODERN METHODS :

- In addition to information about the level of contraceptive use, program officials need to know where users obtain their methods.

- As in the 2007 and the 2009 JPFHS, the 2012 JPFHS survey included a question for current users of modern methods regarding the source of their method and the results were:

Private sources serve almost three-fifths **(56 %)** of current users, compared with 58% in 2007 and 54% in 2009.

- Private hospitals or clinics, pharmacies, the Jordanian Association of Family Planning and Protection (JAFPP), and the United Nations Refugee Welfare Association (UNRWA) clinics are major private sources of supply for modern contraceptive methods .
- The share of the public sector decreased to 44% in 2012 from 46% in 2009.

- ***The sources of contraceptive methods also vary by the method used:***
- Pharmacies are the primary source for users of methods that require resupply, including the pill (35 %) and condoms (39 %).
- Private hospitals and clinics are the primary source for IUDs (22 %), followed by government health centers and JAFPP(Jordanian Association of Family Planning and Protection (19 % each).

- Government hospitals are the primary source for most female sterilizations (54 %), followed by the Royal Medical Services (24 %) and private hospitals (20 %).
- Government health centers are the major source of injectables (63 %), followed by government maternal and child health (MCH) centers (18 %).
- [4] department of statistics (year book of 2012)

REFERENCES

- Contraceptive Updates, Reference Manual for Doctors 2009, by MOHFW & UNFPA,India.
- WHO - Medical eligibility criteria for contraceptive use – 4th ed 2009.
- WHO, Family Planning A GLOBAL HANDBOOK FOR PROVIDERS Update 2011
- “Guidelines for administration of emergency contraceptive pills by medical officers,” Research Studies and Standard Division, Department of Family Welfare, Government of India, June 2009.
- The essentials of Contraceptive Technology, a handbook for clinic staff, John Hopkins Population Information Program, 2010
- Projestin Only Injectables: Fact Sheet. UNFPA India, 2004
- Guidelines for IUDs for medical officers, research studies and standard division, Department of Family Welfare, Government of India - June 2007

REFERENCES CONTD...

- Westhoff C, Heartwell S, Edwards S. Initiation of Oral Contraceptives Using a Quick Start Compared With a Conventional Start: A Randomized Controlled TrialObstet Gynecol. 2007 Jun;109(6):1270-1276.
- Jick SS et al. Risk of non fatal VTE in women using a contraceptive transdermal patch and oral contraceptives containing 35 mcg EE and norgestimate. Contraception 2006;73(3):223-8.
- Sheng J et al. The LNG-IUS study on adenomyosis: a 3–year follow-up study on the efficacy and side effects of the use of levonorgestrel intrauterine system for the treatment of dysmenorrhea associated with adenomyosis. Contraception. 2009 Mar;79(3):189-93.
- Grimes DA et al. Cochrane systematic reviews of IUD trials: lessons learned. Contraception. 2007 Jun;75(6 Suppl):S55-9.
- Lethaby AE et al. Progesterone or progestogen-releasing intrauterine systems for heavy menstrual bleeding. Cochrane Database Syst Rev. 2005 Oct 19;(4)
- K.Park, Text book of preventive and social medicine,contraceptive methods pp.457-474,21st edition,Bhanot publication,Jabalpur, India.
- Jordan Population and Family Health Survey 1012.


Thank you!!!

تم بحمد الله

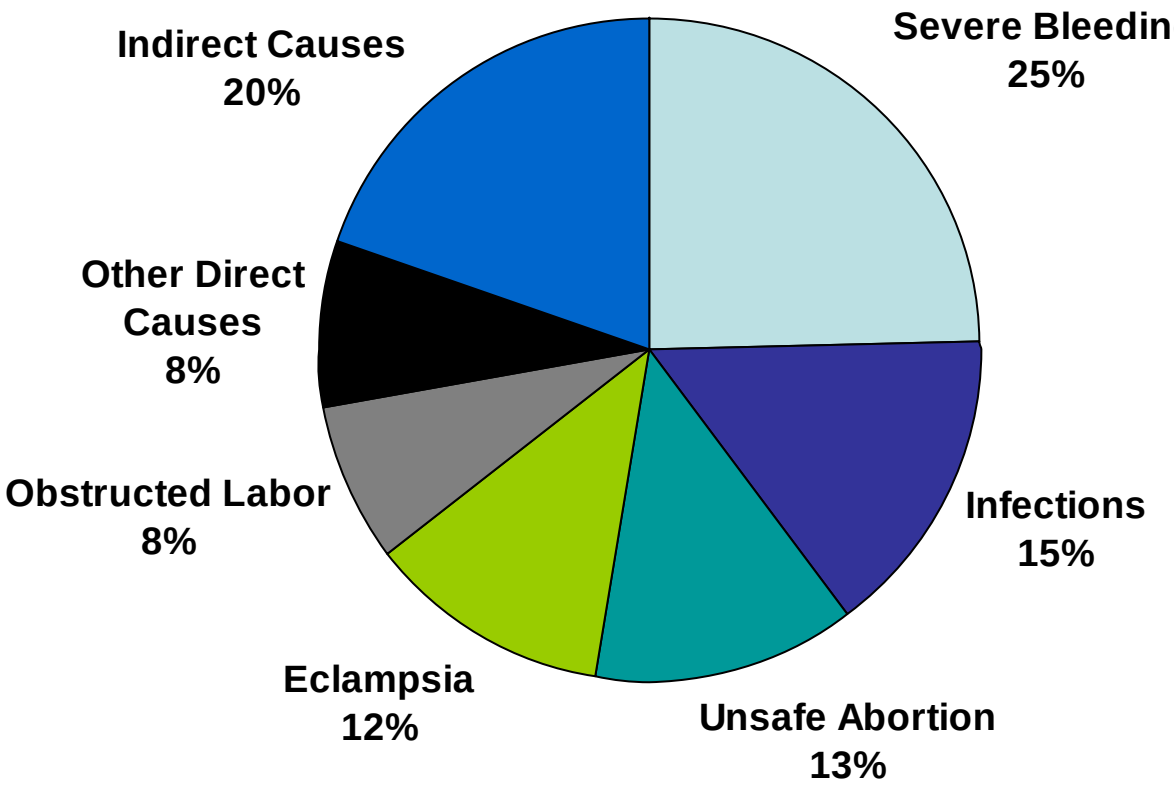
بسم الله الرحمن الرحيم

- الحمد لله رب العالمين والصلاة والسلام على نبينا محمد خاتم الأنبياء وسيد المرسلين وعلى آله وصحبه أجمعين

ويعد

Causes of Maternal Mortality

Pregnancy and Childbirth-Related Deaths to Women, by Cause, 1997

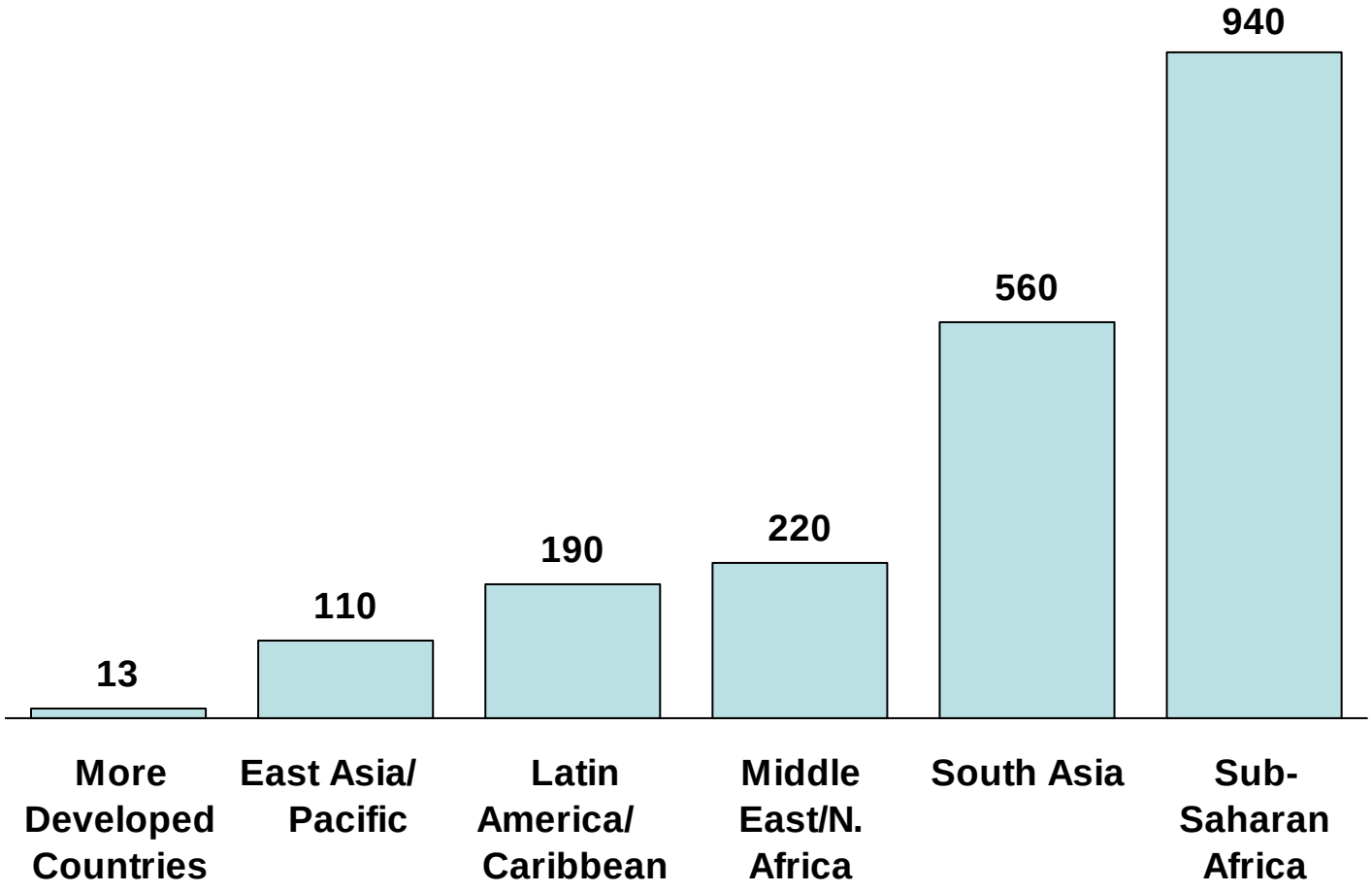


Note: Total exceeds 100 percent due to rounding.
Source: World Health Organization, *Reduction of Maternal Mortality: A Joint WHO/UNFPA/UNICEF/World Bank Statement*, Geneva, 1999.

Notes on Causes of Maternal Mortality

- **Nearly three-quarters of maternal deaths are due to direct complications of pregnancy and childbirth, such as severe bleeding, infection, unsafe abortion, hypertensive disorders (eclampsia), and obstructed labor.**
- **Women also die of indirect causes aggravated by pregnancy, such as malaria, diabetes, hepatitis, and anemia.**

Maternal Mortality, by Region



Source: UNICEF, *Maternal Mortality in 2000: Estimates Developed by WHO, UNICEF, and UNFPA,* 2003.

Notes on Maternal Mortality, by Region

- **Over 99 percent of maternal deaths occur in less developed countries, particularly in Asia and Africa.**
- **While high-quality, accessible health care has made maternal death a rare event in more developed countries, the lack of such health care has fatal consequences for pregnant women in less developed countries.**

Causes of maternal Mortality in Jordan/Neishwat et al.

Direct causes like :

1-Toxemia

2-Anesthesia complications

3- Severe hemorrhage post partum

4- Toxic Shock

5- Cardiac or renal failure

- **Indirect causes :**
  1- Risky pregnancies (age, parity etc.)
  2- Malnutrition and anemia
  3-Poor A.N.C.
  4- Cancers

Pregnancy risk factors that should be considered to maternal and infant mortality rate :

- 1- Age
  2-Ht. And Wt.
  3-Residency
  4-Education
  5-Income
  6-Parity

- 7-Past Medical history
  8-Past obstetric history Smoking or any drug therapy
  9-General condition of the woman pre-concept ional
- 10-Hb level, nutritional, blood pressure and general condition.

Maternal Mortality in Jordan

1990-2008 WHO, UNICEF, UNFPA, WB

(SEP, 2010)

Improve maternal health
Targets and Indicators

Target 5a: Reduce by three quarters the maternal mortality ratio

- 5.1 Maternal mortality ratio
- 5.2 Proportion of births attended by skilled health personnel

Target 5b: Achieve, by 2015, universal access to reproductive health

- 5.3 Contraceptive prevalence rate
- 5.4 Adolescent birth rate
- 5.5 Antenatal care coverage (at least one visit and at least four visits)
- 5.6 Unmet need for family planning

Millennium development goal 5 (MDG5) Target 5A

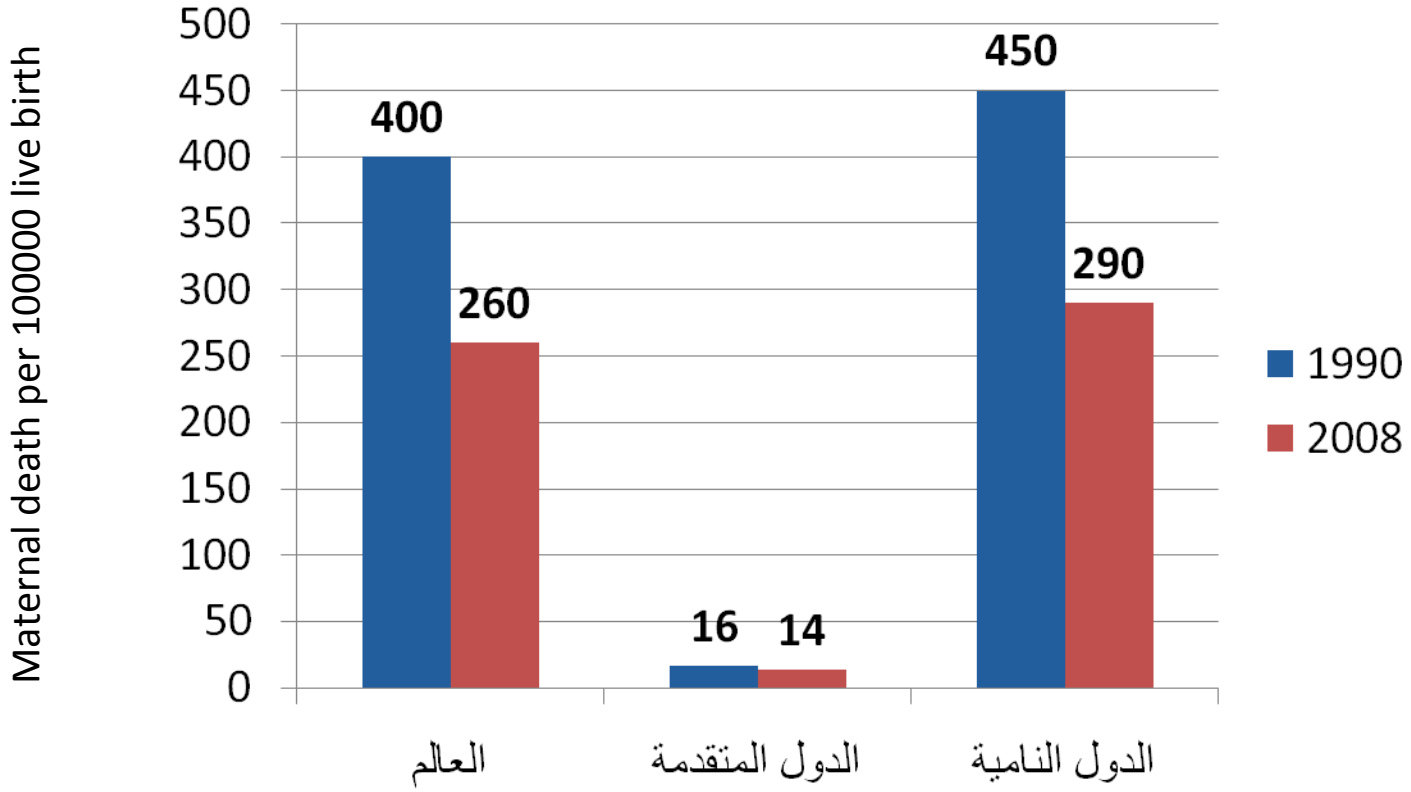
Calls for the reduction of maternal mortality rate (MMR) by three quarters between 2000 and 2015

What does that mean for Jordan?

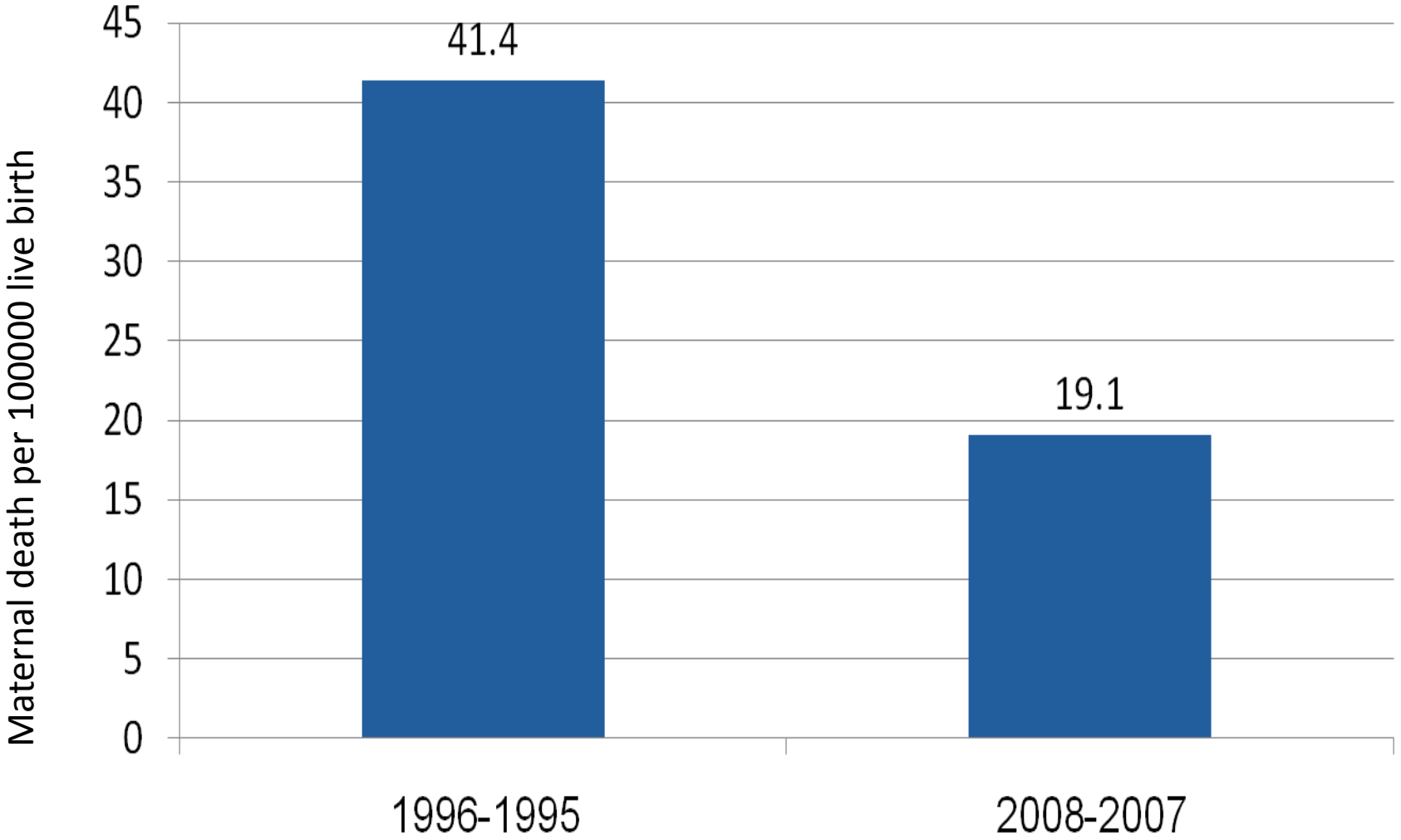
Reduction of MMR from 41 maternal death per 100,000 live births in 2000

To

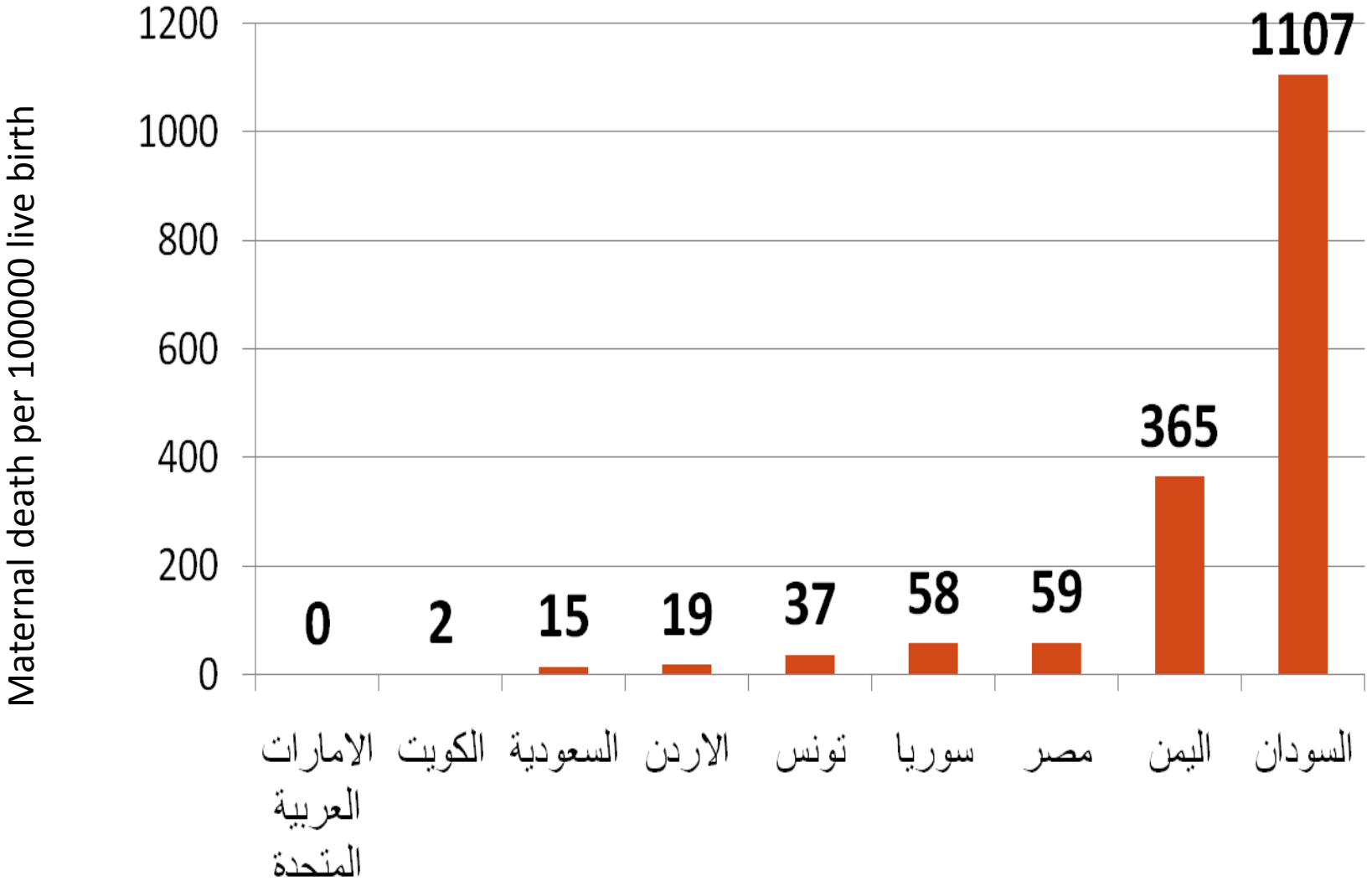
12/100,000 by the year 2015



Trends in Maternal Mortality 1990-2008 WHO, UNICEF, UNFPA, WB (SEP, 2010)



Maternal Mortality Study – Jordan 2007-2008- Higher Population Council, 2009


Maternal death per 100000 live birth
1200
1000
800
600
400
200
0
0
2
15
19
37
58
59
365
1107
الامارات العربية المتحدة
الكويت
السعودية
الاردن
تونس
سوريا
مصر
اليمن
السودان

Causes of Maternal Mortality

Haemaorrage

- 25%

Thromoboembolism

Septisemia

الاسباب غير المباشرة	%26.3
امراض القلب	%10.5
امراض الجهاز العصبي المركزي: الحوادث الوعائية الدماغية،الصرع	%7.9
الامراض السارية	%5.2
فقر الدم المزمن	%1.3
الفشل الكلوي	%1.3

المصدر:الدراسة الوطنية لوفيات الامهات في الاردن(2007-2008)،المجلس الاعلى