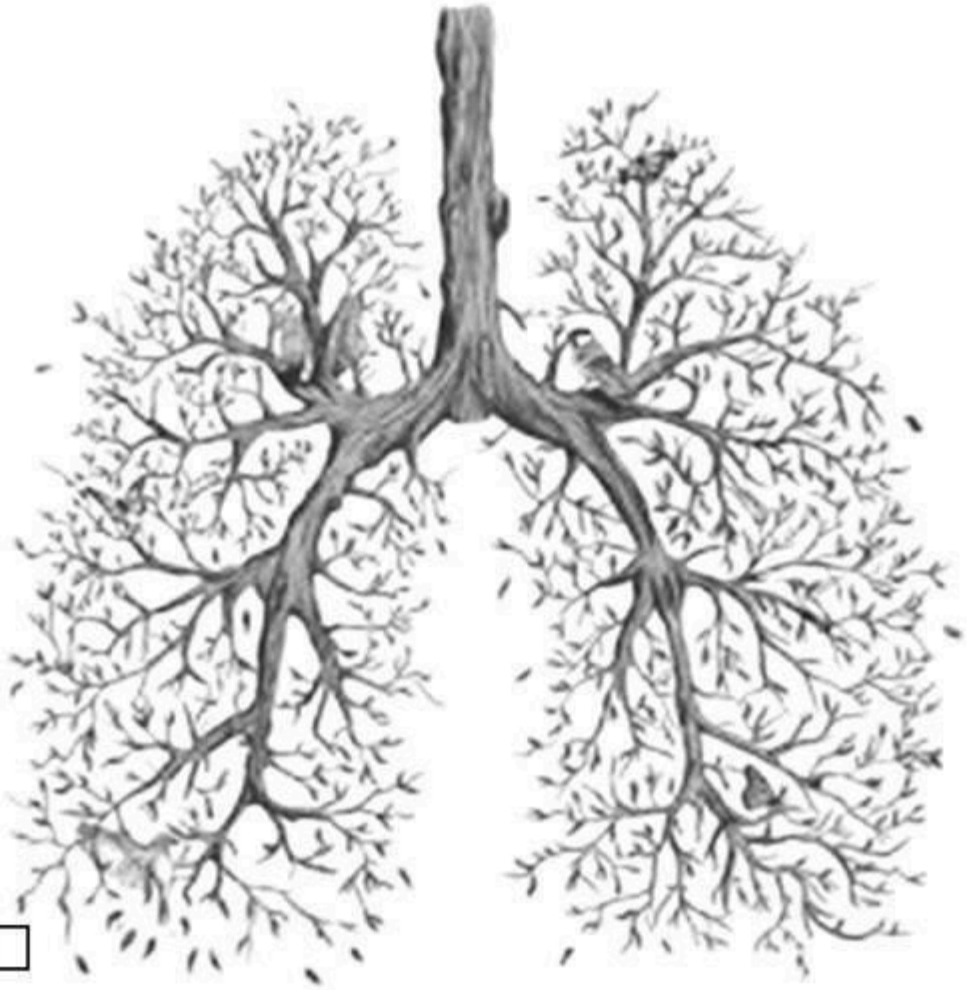


By Mohamed F. Abu Alia



Medical Committee
The University of Jordan

Community Medicine



Slides

Sheet

Lecture # 8

Doctor: Samar AlSharif

Done By: Nadeen Freihat

Lecture no.8: Maternal health.

Traditional methods don't need any medical interfere.

What are the most common traditional methods?

- 1) breast feeding
- 2) abstinence
- 3) fertility awareness method in which the women notice a decrease in temperature of 0.5 degree before ovulation and an increase of 0.5 after ovulation (the difference is 1 degree between before and after ovulation)

It's not used as a common planning service but as a fertility awareness.

Hormonal Methods

the most common method is the contraceptive pills.

1- oral pills: combined pills, progesterone only pills, once-a-month pills (long acting one) which is not normally used "in rare cases) and male pills method but it's not used because society in Jordan and many Arabic countries refuse this method as well as it has many side effects.

2- Depot preparations: injectable, subdermal implants, vaginal rings.

Oral Pills

A) Combined pills: made of estrogen and progesterone (mainly progesterone and low dose estrogen)

* Advantages: the failure rate is almost 0% if used properly.

* Disadvantage: having more side effects than mini pill progesterone (progesterone only pills) because estrogen works on the cardiovascular system so anyone who has any history of atherosclerosis, hypertension, hypercholesterolemia, cardiac disease, we should not give them these pills.

* taken from 5th to 25th day (21 tablets) but progesterone only pills must be taken all through the cycle.

* Mechanism of action:

prevents the ovulation (mainly). At the same time, progesterone makes the thickness of mucosa and the secretion and prevents implantation and the entry of the sperm to the uterus or the fallopian tube so decreases the motility.

* Why it's 100% effective method?

Because there's no ovulation to start with (estrogen prevents the ovulation and progesterone prevents implantation and makes cervical secretions thick making it harder for the sperm to reach the ovum)

*the effectiveness is 100% if taken correctly.

* remember that when choosing the suitable planning method, we must take in consideration 3 things:

- 1- how effective the method is
- 2- personal history of the woman to avoid the known side effects from the method
- 3- the safety of the method and then the cost (the cost of all these methods must be affordable)

* Advantages of combine pills:

- 1- 100% effective
- 2- beneficial effects on menorrhagia (heavy period) by reducing the bleeding. It's used to regulate the hormonal side by giving the necessary hormones for cycle regulation for both married and non-married women.
- 3- Lower the risk of endometrial, ovarian- (30-50%) and possibly colon cancer
- 4- Preserve bone mineral density
- 5- Reduce the risk of ovarian cysts, rheumatoid arthritis, benign breast disease & Ectopic pregnancy & the most important advantage (besides its effectiveness) that it's easy to take.

* Side effects:

- cardiovascular effects (thromboembolic phenomena of estrogen “they are more susceptible to have clots” so any history of heavy smoking, obesity, any cardiovascular diseases hypercholesterolemia, we should avoid the combined pills) (read the slide 54)
- cancer of breast

* Contraindications: absolute & relative

- absolute contraindications like cancer of breast, any history of thromboembolism (estrogen side effect), any history of atherosclerosis, hypertension ... etc.
- relative contraindications like obesity, smoking... etc.

These contraindications are very important to decide the best method to use.

B) Progesterone only pills:

* Mechanism of progesterone only pills action:

- 1- Making cervical mucosa thick (it works on the wall of the uterus)
- 2- Decreasing the motility of Fallopian tubes (prevent the penetration of the sperm)
- 3- Preventing pregnancy without preventing ovulation (preventing implantation)

* It's suitable for:

- 1- lactating women
- 2- Smokers above 35 years old
- 3- Estrogen sensitive women
- 4- People who are absolutely contraindications if use a mixed pill

* disadvantages:

- 1- high risk of neoplasia more than using combine pills
- 2- poor control of the cycle.

* so progesterone can be used as mini-pills, injectable, or long- acting releasing progesterone which has many side effects such as amenorrhea (absence of menstrual cycle) for 6-7 months so women may be afraid of going into infertility.

* Subdermal implantation:

the main disadvantage is that it needs surgical procedure.

the patch release progesterone and has same side effects as any progesterone method.

Vaginal ring:

the woman can't insert it by herself because it should be very deep in cervixes. The idea of it is releasing progesterone also.

* Abortion: it's a common contraceptive method in developed world after pills method but in Jordan it's not used due to religious and legal reasons except in case when there's risk on the pregnant otherwise it's not allowed even if the baby has Down Syndrome for example.

* Conditions under which abortion is done

- Medical
- Eugenic
- Humanitarian
- Socio-economic

- In failure of contraceptive device
-

* Terminal methods (sterilization): also, it's not used in our society except in certain conditions but it's very common in developed countries.

* It's done either by tubectomy (tying off and cut the fallopian tubes apart) or vasectomy, the male sterilization method.

Mechanical methods

The most common method of mechanical contraception is IUDs. The failure rate is 1-3 % (more than pills). It's very useful in cases of having cardiovascular problems (instead of giving pills)

- Advantage:

4-5 years (long-active contraception)

- Disadvantages (Side Effects):

1- heavy bleeding (so we don't use it to a women who has a history of anemia)

2- infection because the IUD is a foreign body

3- Pelvic Inflammatory diseases

4- Ectopic pregnancy

5- May come out accidentally if not properly inserted

* Contraindication: any history of pelvic inflammatory disease, heavy periods, anemia, or ectopic pregnancy → we avoid putting IUDs. Otherwise, IUDs is safe for generally who have cardiovascular diseases.

- Types:

there are types of IUDs which contains progesterone at the same time. The effectiveness is because of both (as foreign body “mechanical” and progesterone) → so reduce the failure rate.

- ideal IUD candidate:

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

Another mechanical and safe method of contraception is: **condoms**.

* The most important advantage of this method is preventing sexual transmitted diseases transmission.

* disadvantages:

- 1- decreasing the sexual sensation
- 2- there are chances of slip and tear off
- 3- failure rate: 2-3% (almost the same as IUDs)

What Do Religions Say About Birth Control and Family Planning?

83% of the Islamic religious leaders in Jordan believe that family planning is permitted under Islam

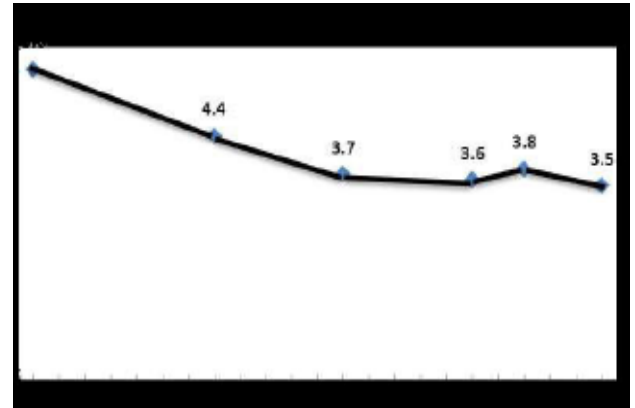
Family planning in Jordan.

- what is the most important indicator of health services in any community?

Fertility rate

(read slide 81, 82)

- figure in slide 83 shows the huge drop in fertility rate from 1990 to 2012 (5.6 – 3.5, respectively). Notice that at the last 3 studies the drop is very small (3.6, 3.8, and 3.5).



Why?

Because it's about personal beliefs (not about having the services or not)

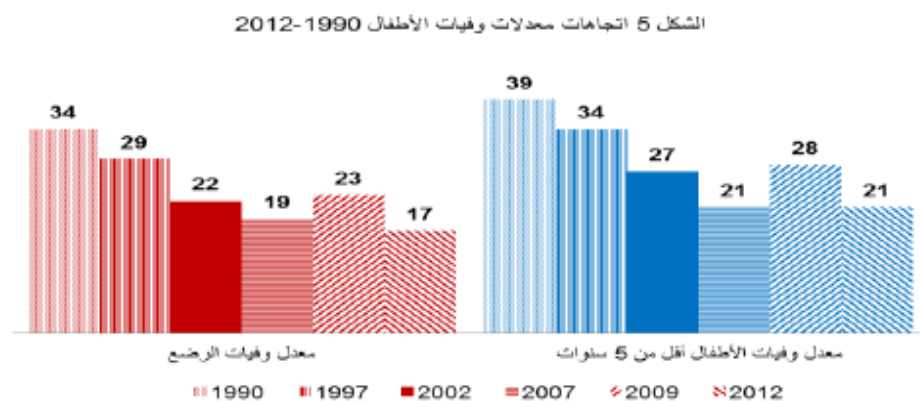
- by decreasing the fertility, infant mortality rate decreases.
- Infant mortality rate is more sensitive and accurate indicator than maternal mortality rate.

- slide 84:

On the left, we have the infant mortality rate “less than 1 year”. There is a big drop between 1990 and 2012.

On the right, the mortality rate of children (<5 years).

Notice the drop also.



- You can know the mortality rate in children (1-5 years) from subtracting the infant mortality in certain year from the mortality rate of children (<5 years) for the same year. For example the mortality rate of children (1-5 years) in 1990 is 5 (39-34) and in 2012 is 4 (21-17).

- focus on 1990, 2007 and 2012 studies.

- * It's 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. (3 times)
 - 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 % in 2007, to 2.2 in 2012.
 - Population growth is used to be very fast in 1990 but it's becoming less by using more contraceptive methods.
-

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.
- The most important problem of high growth rate is the increased consumption of resources causing low quality services and lifestyle.

- * Contraceptive prevalence rate: is the percent of people who are using contraception methods.
- * Contraceptive prevalence rate in 2012 is 61% according to JPFHS. (Increased from 40% in 1990 to 61% in 2012).
 - 42% are using modern methods and 19% are using traditional methods.

* Studies of 2012:

- Modern methods:

IUD users = 21% (most common method used)

Pills and condoms = 8 % each

female sterilization (surgical) = 2%

LAM and injectables = 1% each.

- Traditional methods:

withdrawal= 14% (most common)

rhythm = 4%

- according to people visiting the clinics, why the modern methods are more common than traditional methods?

Because traditional can be used at home without visiting family planning services.

the main source of supply for family planning services is mainly the private sections. (56% in 2012, 58% in 2007, 54% in 2009)

* Private hospitals, clinics, pharmacies, JAFPP (40%), UNRWA are considered as non-governmental (private)

* 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 %).

* 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 %).

Best Wishes :")