

Maternal and Child Health

(MCH)-L-1/23-24



Prof Dr Najlaa Fawzi
Family and Community Medicine Dept.

Objectives:

- Define reproductive health and its components**
- Define MCH**
- Identify the components of MCH**
- Recognize the main objectives and elements of maternal health care (antenatal, natal and postnatal care)**
- Spot the factors determine the utilization of MCH services**



Reproductive health

Reproductive health, or se
cesses the reproductive
stages

Reproductive health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes.

Importance of Reproductive Health

It is very important for an adult and adolescents to be aware of sexual health, reproduction, contraceptives, and STDs.

This will help in maintaining good reproductive health, physically as well as mentally.

People can protect themselves from sexually transmitted infections and diseases only if they are well informed about the same.

Women should be aware of their fitment for pregnancy.

They must have access to proper medical services when they are pregnant, have a safe delivery and deliver a healthy baby.

Components of Reproductive Health

There are three essential components of sexual and reproductive health care-

1. Family planning – It has a significant impact on the well-being of families and especially women. With better family planning and the use of contraceptives, one can avoid unwanted pregnancies, and space births and also protect themselves from STDs.

2. Sexual health – It refers to a respectful and positive approach towards sexual relationships. It is a very important prerequisite for good reproductive health.

3. Maternal health – It refers to the maintenance of a woman's health during pregnancy and after childbirth.

Maternal & child Health (MCH)

- **Maternal and child health (MCH) care is the health service provided to mothers (women in their child bearing age) and children. The targets for MCH are all women in their reproductive age groups, i.e., 15 - 49 years of age, children, school age population and adolescents.**
- **Is one of the important elements of Primary Health Care.**
- **It refers to promotive, preventive, curative & rehabilitation health care for mothers & children.**
- **These services should be available affordable and accessible to all the target population in their communities.**

MCH Problems

- **Main health problems affecting the health of mother and child turn around:**
 - 1. Malnutrition**
 - 2. Infections**
 - 3. Consequences of unregulated fertility**
 - 4. Lack of health care and other services with poor socioeconomic conditions.**

Why ?

Special services for women and children.

AND

The reasons for combined services for women & children

6.6. million

DEATHS PER YEAR

for children under age five,
most of them preventable



289,000

maternal
deaths
per year



1- Mothers & children form the majority of the population in developing countries

2- Many of health problems faced by mothers & children are preventable .

3- Stress of pregnancy, lactation, growth & development

4- Mother & children represent the least powerful sector of the community .

5- Deaths of mothers & children is major determinant of mortality in developing countries

OBJECTIVES OF MCH SERVICES

- **To insure complete health care for all children in the community.**
- **To insure health care for all women during their reproductive life.**
- **Regulate fertility and promote family planning services.**

Components of Maternal and Child Health

- Maternal health.**
- Child health.**
- Family planning.**
- Handicapped children.**
- School health.**
- Care of children in special setting such as day care**

Essential elements of MCH services in PHC center:

1. Pre-marital care ←

2. Antenatal care ←

3. Natal care (*)** ←

4. Post-natal care ←

5. Family planning ←

6. Care of new born ←

7. Child health care ←

8. Growth monitoring ←

9. Nutrition Rehabilitation ←

Women
Health

Child Health



MATERNAL HEALTH

Understanding the
mom to be

MATERNAL HEALTH CARE

Definition (WHO)

Maternal health refers to the health of women during pregnancy, childbirth and the postpartum period.

Each stage should be a positive experience, ensuring women and their babies reach their full potential for health and well-being.

Why maternal health is important?

Not only does access to quality maternal healthcare ensure the good health of a mother – her good health also helps to ensure the good health of her newborn child and the rest of her family

The Objectives of Maternal Health Services

- **To provide optimal antenatal care to pregnant women as early as possible**
- **To prevent and detect any deviation on the normal pattern of pregnancy**
- **To identify and give special attention and care to pregnant women at risk**
- **To ascertain outcome of each registered pregnancy and follow up on the survival of newborn infants**
- **To reduce maternal deaths by early detection and management of risk factors and complications**

- **To ensure that optimal standard of care is provided to high risk pregnant women during delivery.**
- **To prevent adverse complications that may arise after childbirth by providing postnatal care either at home or in PHC as early as possible and within 42 days**
- **To promote birth spacing by provision of comprehensive family planning services to women (counseling and supplies)**
- **Encourage women to share responsibility of own health and maintaining healthy lifestyle such as weight control and physical exercise**

Pre-marital care

Premarital care (PMC) is a worldwide activity that aims to diagnose and treat unrecognized disorders and reduce the transmission of diseases to couples and children.

- **Premarital care (PMC) involves the promotion of health and well-being of a woman and her partner before pregnancy and is considered a primary preventive approach for couples planning for conception and an important step towards protecting society and allowing people to enjoy life**
- **PMC includes premarital health counseling and a general medical examination**

- **PMC can identify and modify, through prevention and management, some behavioral, medical, and other health risk factors known to impact pregnancy outcomes**

PMC may include the following

1. Complete medical and family history: thalassemia, TB, STD.

2. Full clinical examination

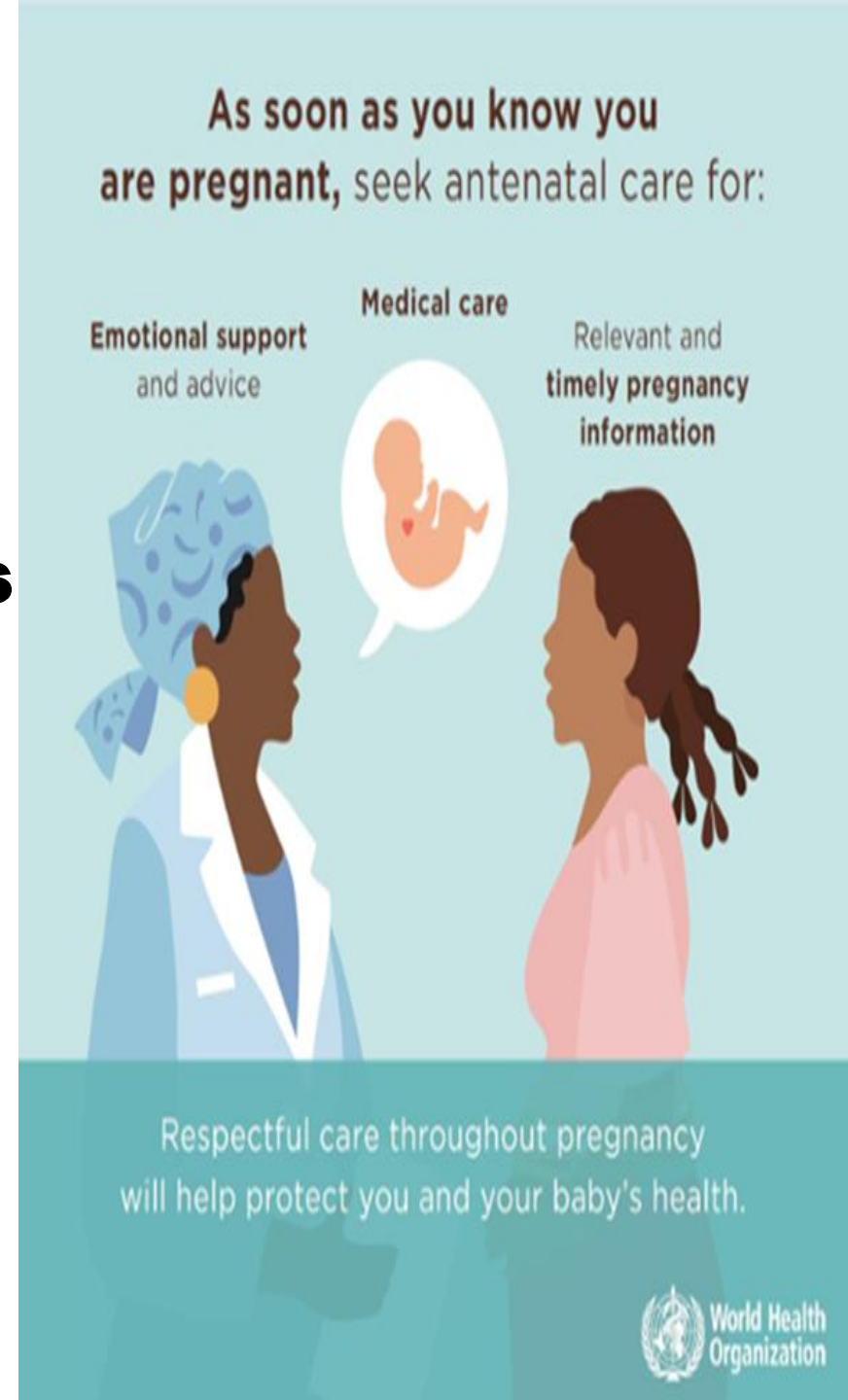
3. Health Education, sex education, counseling, Family Planning education & STDs prevention.

4. Laboratory investigation blood group and Rh, HIV, HB&C

5. Immunization

ANTENATAL CARE

- ❑ **Antenatal care is the care received during pregnancy from skilled health personnel.**
- ❑ **The World Health Organization defines antenatal care (ANC) as “care before birth”, and includes:**
 - **Education**
 - **Counseling**
 - **Screening and treatment to monitor and promote the well being of mother and child.**



Objectives of antenatal care

- **To maintain the mother and babies in the best possible state of health.**
- **To recognize abnormalities and complications at an early stage.**
- **To educate the mother in the physiology of pregnancy.**

Basics of ANC

1. Ante-natal examination
2. Risk screening and assessment
3. Preventive measures
4. Health education

ante-natal follow-up should be:

Adequate: which includes **quantity & quality**

Quantity

- ❑ Time of onset of first contact → 1st trimester
- ❑ No. of contacts →

Quality antenatal care will:



Encourage women to seek **skilled care at childbirth**



Reduce stillbirths, childbirth complications and newborn deaths



Help women get care and counselling for HIV, malaria, TB and other conditions

Quality antenatal care should be available for all women to ensure a positive pregnancy experience.

WHO recommends a minimum of four antenatal visits. Changed since 2017 .

In Iraq still follow the minimum four antenatal visits

The WHO recommendation :Antenatal care with a minimum of eight contacts are recommended to reduce perinatal mortality and improve women's experience of care.

- **The WHO model recommends pregnant women to have their first contact during the first 12 weeks' gestation.**

- **With following contacts taking place at:
20, 26, 30, 34, 36, 38- and 40-weeks' gestation**

The contacts during the third trimester are at critical time points that may allow assessment of well-being and interventions to reduce stillbirths

WHO FANC model <small>OLD MODEL</small>	2016 WHO ANC model
<i>First trimester</i>	
Visit 1: 8–12 weeks	Contact 1: up to 12 weeks
<i>Second trimester</i>	
Visit 2: 24–26 weeks	Contact 2: 20 weeks Contact 3: 26 weeks
<i>Third trimester</i>	
Visit 3: 32 weeks	Contact 4: 30 weeks
Visit 4: 36–38 weeks	Contact 5: 34 weeks
	Contact 6: 36 weeks
	Contact 7: 38 weeks
	Contact 8: 40 weeks
Return for delivery at 41 weeks if not given birth.	

WHO is recommending early pregnancy ultrasound before 24 weeks for :

- **Accurate gestational age ascertainment**
- **Identifying multiple pregnancies and fetal anomalies.**
- **Enhance the maternal pregnancy experience**

Components of ANC

- i. Routine well woman care during pregnancy**
- ii. Specific Health protection in pregnancy(WHAT ARE ?)**
- iii. Continuous monitoring of maternal well being**
- iv. Continuous monitoring of fetal development**
- v. Mental Preparation**
- vi. Family Planning**

Schedule of Tetanus Toxoid (WHO)

- ✓ **TT1: At end of 1st trimester**
- ✓ **TT2: Four weeks after TT1**
- ✓ **TT3: Six months after TT2**
- ✓ **TT4: One year after TT3**
- ✓ **TT5: One year after TT4 or during next pregnancy**

What is a high-risk pregnancy?



The complications leading to maternal death can occur without warning at any time during pregnancy and childbirth. However, some can be screened and prevented. That is why it is crucial to ensure monitoring and identifying high risk pregnancies through antenatal care which should be available for every pregnant girl and woman.

❖ **Central purpose of antenatal care is to identify ‘High Risk’ cases as early as possible and give skilled care to them.**

All pregnancies carry risks.

The definition of a “high-risk” pregnancy is any pregnancy that carries increased health risks for the pregnant person, fetus (unborn baby) or both.

People with high-risk pregnancies may need extra care before, during and after they give birth.

This helps to reduce the possibility of complications.

A high-risk pregnancy may be one that involves chronic health problems, such as diabetes or high blood pressure; infections; complications from a previous pregnancy; or other issues that might arise during pregnancy.

What causes high-risk pregnancy?

Factors that make a pregnancy high risk include:

- **Preexisting health conditions.**
- **Pregnancy-related health conditions.**
- **Lifestyle factors**
- **Age (being over 35 or under 17 when pregnant).**

Assessment of risk pregnancy :

- **During ante-natal care women are classified according to the risks associated with the pregnancy**
- **Risk assessment in pregnancy helps to predict which women are most likely to experience adverse health events and enables providers to administer risk-appropriate perinatal care.**
- **High risk pregnant women are advised for more frequent antenatal contacts and they must deliver in a hospital**

ASSESSING RISK IN PREGNANCY

A risk factor is the name given to any condition, past or present, which is known to be associated with increased maternal and/or fetal morbidity.

Epidemiological
risk factors
Social
circumstances

Maternal Age
Parity
General risk
factors
Social
circumstances

Obstetric
History

- History of operative delivery.
- History of a stillbirth or neonatal death.
- Previous ante-partum hemorrhages.
- Previous post-partum hemorrhages.
- History of low birth weight infant

DM
Anaemia
HT
UTI
Heart disease
Obesity and
overweight
Epilepsy

Medical
Conditions

Complications
arising in
pregnancy

أستمارة الحامل

رقم الاسرة
رقم الحامل

التاريخ : / /

Notes for Special care: Colour letter (R) in red pencil here	العمر		8		الاسم				
	العمر				اسم الزوج				
	هاتف	دار	زقاق	محلة	حي	محافظة	العنوان		
	هاتف	دار	زقاق	محلة	حي	محافظة	عنوان اقرب شخص		
الاولاد			درجة القربى للزوجين	ثقافة الزوج	ثقافة الزوجة	مهنة الزوج	مهنة الزوجة	تاريخ الزواج	العمر عند الزواج
اناث	ذكور	احياء							

R

1 Medicals History

Diabetes
Hypertension
Renal Disease
Heart Disease
Epilepsy

Tuberculosis
Drug Sensitivity
Smoking
Blood Transfusion
Previous Surgery

5 Family History

Diabetes
Hypertension
Multiple Pregnancy
Congenital Anomaly
Mental Retardation

8 Menstrual History

Menarche L M P Cycle EDD Days Rhythm Was she :
- on pills Yes No
- or lactating Yes No
before L M P ?

9 Past Obstetric History

No.	Date	Duration of Pregnancy	Type of labour	Presentation	Newborn			Complication			Place of Delivery	Birth attendant
					Sex	Alive	wt	Tox	APH	P.P.H.		

11 Present Pregnancy

General Examination
Stature (slim, Normal, full)
Anaemia
Heart
Respiratory System
Breast

Teeth
goiter
Blood Pressure
Weight
Height

6 Investigation

Hb
VDRL
Blood group
Urine
Others
Gm.
Rh
TPHA
Antibody

Natal Care (DELIVERY CARE)

Natal care is referred to the care given to a woman during childbirth.

Caring for woman in labour demand sensitivity and awareness of her views of labour and of her needs as they relate to her experience.

WHO estimates that 15% of births/pregnancies experience “major obstetric complications.

Three quarters of all maternal deaths occur during delivery and immediate post- partum period.

Therefore, the WHO recommends skilled attendant at every birth that can:

1. Provide good quality care on an ongoing basis ,care should be hygienic , safe and kind.

2. Readiness to deal with complications for mother and baby such as prolonged labor, antepartum hemorrhage, convulsions, malpresentation, prolapse of cord, etc.

3. Refer on time and safely when higher level care is needed

4-Care of the baby at delivery- resuscitation, care of the cord, care of the eyes.

WHO recommends that a women not be discharged before 24 hours after birth.

Regardless of the place of birth, it is important that someone accompanies the woman and newborn for the first 24 hours after birth to respond to any changes in her or her baby's condition.

Globally in 2022, 14 percent of deliveries were not attended by skilled health personnel. Newborns are most vulnerable during the first hours and days of life, yet this critical window is being missed.

POSTNATAL CARE(PNC)

Postnatal period is defined by the WHO as the period beginning one hour after the delivery of the placenta and continuing until six weeks (42 days) after the birth of an infant.

(PNC) is the care given to the mother and her newborn baby immediately after the birth and for the first six weeks of life

Why Postnatal Care(PNC) is important ?

- **The postnatal period is a critical phase in the lives of mothers and newborn babies.**

Many complications can occur in the first 24 hours.

- **Most maternal and infant deaths occur during this time.**
- **This is the most neglected period for the provision of quality care.**

When to start PNC

WHO recommends mothers and new born should received PNC in health facilities for at least 24 h after birth, if birth in health facility

If birth at home the 1st postnatal contact should be as early as possible within 24h of birth.

At least three additional contacts are recommended for all mothers and new born on:

 **Day 3 [48-72hr]**

 **Between days 7-14 after birth**

 **Six weeks after birth**

The first weeks following childbirth are an important and special time

All women and babies should receive care in health facilities during the **first 24 hours after birth.**

Three additional postnatal care contacts should occur in the **first 6 weeks.**



Aims of Care in the Postpartum Period

Care during the postpartum period aiming the following:

1-Support of the mother and her family in the transition to a new family arrangement, and response to their needs.

2-Prevention, early diagnosis and treatment of complications of mother and infant, including the prevention of vertical transmission of diseases from mother to infant.

3-Referral of mother and infant for specialist care when necessary.

4-Support of breastfeeding.

5-Counseling on maternal nutrition, and supplementation if necessary.

6-Counseling and service provision for contraception, birth spacing.

7-Immunization of the newborn and mother

The most frequent reported health problems in the postpartum period are :

- Infections (genital infections) .**
- Bladder problems .**
- Frequent pelvic and headache pain .**
- Hemorrhoid and anemia .**
- Constipation .**
- Depression , anxiety .**
- Breast problems .**

Postnatal Care Services in Iraq

The mother visits the PHC centers at least once during the 6 weeks following delivery, where the mother receives physical examination, ferrous sulfate tablets if anemic, vitamin A (200,000 IUs) and may receive counseling on breast-feeding and family planning through health education, and immunization according to the national schedule.

Globally, only 65 per cent of mothers and 68 per cent of newborns received a post-natal health check within the recommended time period.

The factors are known to affect the use of maternal health services across the world:

- ❖ Maternal education**
- ❖ Woman's age**
- ❖ Employment and income**
- ❖ Socio-economic status**
- ❖ Residence (i.e. rural/urban)**
- ❖ Parity**
- ❖ Distance to health facilities**
- ❖ Exposure to the media**

A third of women do not have even four of a recommended eight antenatal checks or receive essential postnatal care, while some 270 million women lack access to modern family planning methods

Factors that prevent women from receiving or seeking care during pregnancy and childbirth are:

- **Health system failures that translate to**
 - 1-poor quality of care, including disrespect, mistreatment and abuse**
 - 2- insufficient numbers of and inadequately trained health workers**
 - 3- shortages of essential medical supplies**
 - 4- the poor accountability of health systems**

- **Social determinants** , including income, access to education, multiple demands on women's time
- **Harmful gender norms and/or inequalities** that result in a low prioritization of the rights of women and girls, including their right to safe, quality and affordable sexual and reproductive health services
- **External factors** contributing to instability and health system fragility, such as climate and humanitarian crises.



Any Question

References

World Health Organization

Counselling for Maternal and Newborn Health Care: A Handbook for Building Skills.2018 .

WHO recommendations on postnatal care of the mother and newborn.2017

World Health Organization, 2022, WHO recommendations on maternal and newborn care for a positive postnatal experience. Geneva, 2022.